·THE SMALL HOME·

FINANCING · PLANNING · BUILDING

PLANS FOR THIS HOME ON PAGE 9

FEBRUARY 1928

PRICE 15c

Blue Prints and Specifications for all designs in this book can be obtained direct from

THE NORTH CENTRAL DIVISION
OF THE
Architects' Small House Service Bureau, U. S.
Room 813, No. 141 Wisconsin St.
Milwaukee, Wisconsin

Published Monthly By

THE ARCHITECTS' SMALL HOUSE SERVICE BUREAU
OF THE UNITED STATES, INC.

Controlled by
The American Institute of Architects

Endorsed by
The United States Department of Commerce

REGISTERED U. S. PAT. OFF.

For Complete Statement See Page 3

A Louis 16th Pattern

WHAT a difference it makes—good furniture. Not price necessarily, but quiet elegance. Not merely beautiful, but refined taste. Not pretentious, but just the right design with an unmistakable precedence in motif.

These are just some of the salient characteristics of every West Michigan creation coupled with very unusual quality of construction, craftsmanship and choice of woods and veneers that only the old Dutch craftsman puts into his work.

The suite illustrated here finds its theme in the time of Louis 16th. Carvings are all hand tooled from solid wood, with an overlay panel of Redwood burl. Drawer fronts are of highly figured Butt Walnut veneers skillfully matched.

Made in Holland, Michigan, there is the West Michigan high standard throughout.

West Michigan Furniture Company

Holland, Michigan

Have you thought of the "Sockets *of the* eyes" *of your* New Home ?

NO doubt you have carefully planned the windows of your new home—the eyes of your house. But have you thought of the "sockets" of those eyes—the frames that hold the windows?

If your home is to be cozy and warm in winter and cool and clean in summer, the windows must be set in weather-tight "sockets" or frames that will not leak water or air or dust.

Well-chosen windows will give style and distinction to your home, and the soft, graceful lines of Andersen Genuine White Pine Window Frames will lend charm to any style of architecture.

Let your windows insure you a cheerful house and your window frames a comfortable house. If you want to know how to plan for comfort and for safe "sockets" for the eyes of your new home, fill out and mail the coupon below.

Andersen Distinctive Features

1 Patented, *noiseless, long wearing Andersen pulleys* used exclusively.

2 Genuine soft *White Pine* sills and casings—last a lifetime.

3 Patented, exclusive *weather-tight* features for home comfort.

4 Absolute *accuracy* of milling insures tight-fitting joints.

5 *Dependable* because guaranteed by a reliable manufacturer.

6 The Andersen *Trade Mark* is on every frame.

Andersen FRAMES

ANDERSEN LUMBER COMPANY
Box 5202 Bayport, Minnesota

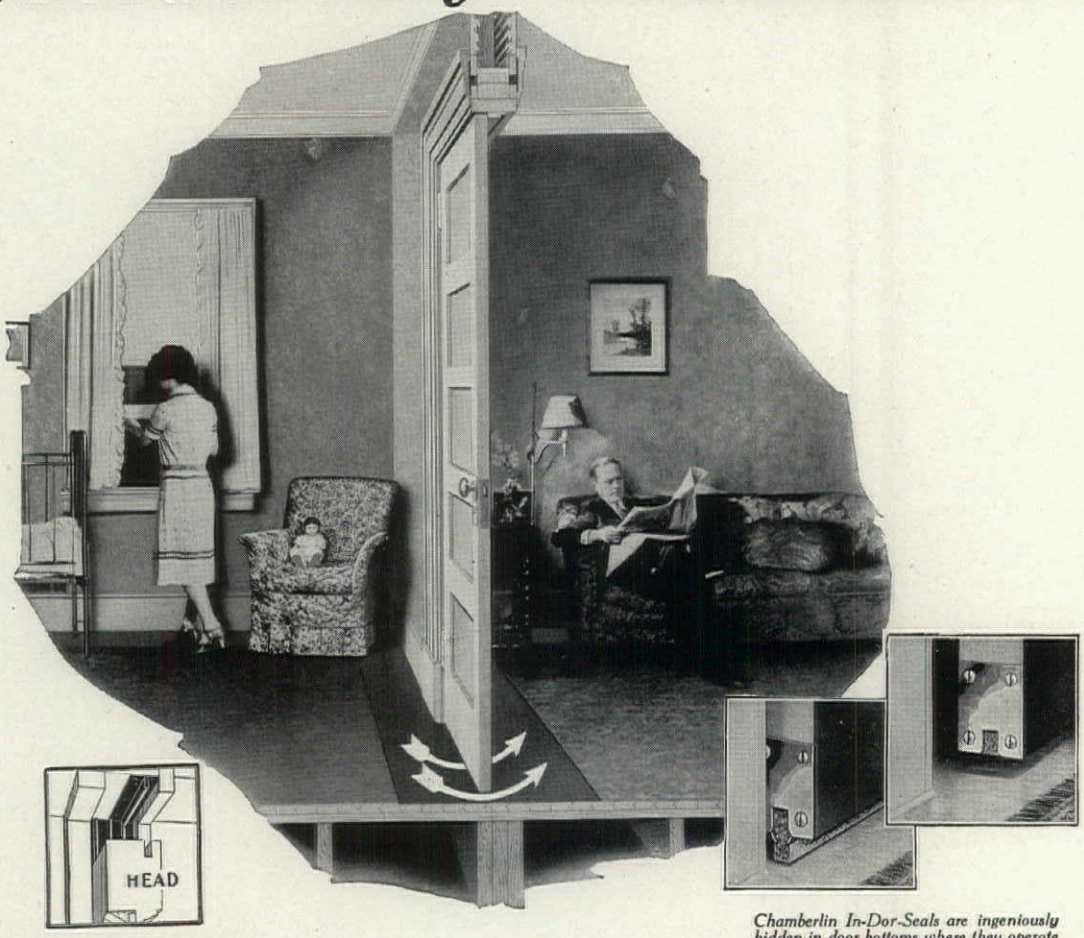
I am interested in building and will be glad to have you send me without charge or obligation a copy of your illustrated booklet entitled "How to Make Your New Home More Comfortable."

Name _____

Street _____

City _____ State _____

Such Double Protection Is Exclusively Chamberlin



34 years' experience has proved Chamberlin Tongue-in-wood-Groove Contact sound in principle and over 90% efficient. The groove is always of standard width,-an important detail necessary to obtain effective weather strip installations.

Chamberlin In-Dor-Seals are ingeniously hidden in door bottoms where they operate silently and automatically. A thick but soft felt strip does the work. It rises clear of rugs when the door opens and drops snugly to the floor when the door closes.

Chamberlin equipment includes a newly patented metal-interlocking strip at meeting rails. Chamberlin installation practice requires that sash be properly dressed, trimmed and trued if necessary before Chamberlin is installed.

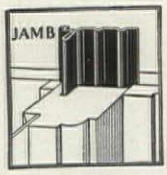
THERE is no doubt about your desiring the protection to health; the freedom from dangerous draughts and from annoying wind-driven dust and dirt that come with properly applied weather stripping. But there is an additional advantage to the home owner who chooses Chamberlin. Conditions over which no one has any control, such as settling of the building, expansion and contraction due to moisture, and the like—occasionally develop conditions in the best of weather stripping installations which require expert attention. When you have chosen Chamberlin, you obtain permanent weather stripping protection. Wherever a Chamberlin installation has been made there is a Chamberlin organization ready to step in at any time and keep the job right. Chamberlin—a million-dollar corporation with 35 years of weather stripping experience—service-guarantees all of its equipment "for the life of your building."

Call our local factory branch for free estimates or write to—

CHAMBERLIN METAL WEATHER STRIP COMPANY

West Lafayette Boulevard, Detroit, Michigan

Over 100 Sales and Service Branches throughout the United States



Weather stripped windows should be practically airtight yet easy to operate. Chamberlin covers entirely the runways of sliding windows but raised track-like corrugations reduce sliding friction to a minimum.

CHAMBERLIN WEATHER STRIPS

"SINCE 1893-THE STANDARD"

In both lower and upper corners of sliding windows, Chamberlin Weather Strips are perfectly joined or mitred. Chamberlin design requires this operation—an installation detail necessary to obtain maximum weather tightness.

·THE SMALL HOME·

FINANCING · PLANNING · BUILDING

ROBERT T. JONES, A. I. A., EDITOR

CONTENTS, FEBRUARY, 1928

VOL. VII No. 9

SHINGLES FOR SIDE WALLS,
By H. Vandervoort Walsh 5

FIVE-ROOM MASONRY BUNGALOW,
Design 5-B-31 8

A STUCCO HOUSE WITH AN INGENIOUS PLAN,
Design 6-F-19 10

GRACEFUL COTTAGE OF GOOD PROPORTIONS,
Design 5-K-16 12

THE BUILDING AND LOAN ASSOCIATION,
By H. A. Simons 13

WHAT ELSE DO YOU GET WITH YOUR LOT?
By Robert T. Jones 14

WHEN A DINING ROOM IS NOT NEEDED,
Design 5-C-9 15

TWO EXTERIORS FOR A FLEXIBLE PLAN,
Designs 4-A-36 and 4-A-37 16

THE AVERAGE MAN'S HOME,
Design 4-H-1 17

PLANTING A SMALL HOUSE FOUNDATION,
By Francis Asbury Robinson 18

A BASEMENT TO BE LIVED IN 19

A HOMEY COLONIAL COTTAGE,
Design 5-D-37 20

BEFORE YOU BUILD READ THESE BOOKS 22

Published monthly by The Architects' Small House Service Bureau of the United States, Inc. Publication office and national headquarters, 1200 Second Ave. S., Minneapolis, Minn.; Regional Bureau Offices, 250 Park Ave., New York City; 194 Boylston St., Boston, Mass.; 151 East Market St., Indianapolis, Ind.; 1197 Stout St., Denver, Colo.; 813 Goldsmith Bldg., Milwaukee, Wis.; 202 Northern Life Bldg., Seattle, Wash.; 230 Fifth Avenue., Pittsburgh, Pa.; 625 Locust St., St. Louis, Mo.; 7 West Madison St., Chicago, Ill.

Terms: $1.00 per year United States and Canada. $2.00 foreign.

Copyright 1927 by The Architects' Small House Service Bureau of the United States, Inc. The plans and editorial matter appearing in The Small Home cannot be re-published without permission from the publishers.

MY friend, Alonzo Torriani, is a sculptor—as volatile as any member of his race, as much a Bohemian as any artist I've ever known, but incidentally the possessor of considerable good sense.

He is married, and the father of two brown-eyed, curly-black-haired "be-bes," as he calls them. They live in a beautiful old rambling house in an attractive suburb. The building cuddles under great elms and maples on a triangular piece of corner-property—it's what the realtors call a "choice" location.

Duplicates af Alonzo's public-building sculptures stand about the garden—a boy-and-goat fountain near a crabapple tree, the slim figure of a dryad in a niche of the shrubbery, and quaint statues of saints near the studio.

This last used to be a tumble-down shed, a blacksmith-shop. For the whole property was the blacksmith's home in the days before the filling station down the street got all the blacksmith's trade. The blacksmith was just about to give up when Alonzo discovered his house. But he wouldn't come down one cent below $2,800. And he wanted cash. Torriani couldn't pay it. But he could draw.

He made sketches in color of the house and shop as he intended them to be. One drawing showed the exterior as it would look with a roof of green shingles, new shutters painted green, the old spindle-work of the porch swept away and replaced by a simple stoop.

In another, the artist showed the barn moved nearer the house, joined with it by means of a spacious hallway and remodeled into a substantial, well-heated studio-building. He planned a fireplace where the old forge had stood and pictured the inside walls lined with an insulating wallboard.

In short, Torriani made a picture of every dream he dreamed about the old blacksmith's cottage and shop. I never saw the drawings, but I know they were beautiful, for I have been in the house many times since his dreams were realized.

However, the point of my story is how he got to realize them. When his drawings were done, he took them to the local banker and asked for a loan. Not of $2,800, but $4,000!

And he got it—enough to buy the whole property and remodel it. The banker considered it a good loan, not because an appraisal proved it to be such, but because Alonzo's drawings showed that the home-to-be would be valuable enough to justify such a loan.

Folks often wonder if an architect's services are worth his fee. This story of how an artist got his home is a complete answer. Few of us could do what Torriani did. But any one will find a well-drawn set of plans for a beautifully designed home an asset, when seeking funds to build with. Beauty has value—even in the consideration of hard-headed bankers.

ENDORSEMENTS

The Architects' Small House Service Bureau is the only organization of the kind in the United States controlled by the American Institute of Architects and endorsed by the Department of Commerce United States Government

THE Architects' Small House Service Bureau idea originated in and is approved by the American Institute of Architects, and in order that the development of the idea may retain the character of a professional service and be prevented from assuming the character of a purely commercial undertaking, the organization of the Bureau involves a certain control of its policies by the Institute.

"This control exists solely through the right of the Institute to appoint a majority of the Directors of the Bureau, such appointees being able thereby to impose policies consistent with the expressed wishes of the Institute.

"The approval of such policies does not carry with it any interest in or approval of any specific acts of the Bureau in the development of its operation, nor any financial interest or control whatever.

"The approval of the Bureau by the Institute means:

"(a) That it approves the idea only.

"(b) That it assumes no responsibility for the designs, plans, specifications or other service of the Bureau any more than it assumes responsibility for the service of individual members of the Institute.

"(c) That it assumes no responsibility for nor does it in any way presume to endorse any organization with which the Bureau may do business, nor any type or types of building construction or materials involved in houses designed by the Bureau.

"The Board looks upon an architect's work in a Bureau as primarily a contribution to the improvement of the small house architecture of this country, involving houses of not more than six primary rooms."

BOARD OF DIRECTORS,
The American Institute of Architects.

I have looked into the work of The Architects' Small House Service Bureau of The United States with its divisions and branches and have examined its organization and incorporation papers. The complete plans, specifications, documents and bills of materials, with the designs worked out for local conditions and to use stock materials and eliminate waste, materially simplify home building problems. The form of control by The American Institute of Architects should guarantee a high standard of service. It gives me pleasure to endorse this work and to assure you that the Department of Commerce will do all it can to co-operate with the Institute and the Bureau.

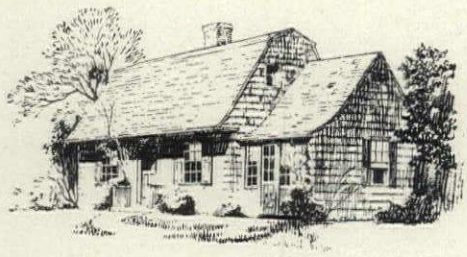
HERBERT HOOVER,
Secretary of Commerce,
United States Government.

Entrance of Architects' Small House Service Bureau Design 6-A-66

Creosote stains allow the grain of the shingle to show through, and produce a surface almost rug-like in softness.

·THE SMALL HOME·

FINANCING · PLANNING · BUILDING



SHINGLES FOR SIDE WALLS

There Is A Natural Beauty About Them That No Art Can Imitate

By H. VANDERVOORT WALSH

Professor in the School of Architecture, Columbia University

AS independent as man may think himself to be, he is entirely enslaved by the conditions of the world in which he lives. When he creates something, he either borrows his ideas from nature or learns enough about natural laws to direct them. Many an invention by man is but the adaptation of some mechanism, used by an animal or plant for countless generations.

When man cast about for a method of covering his house to keep out the rain, it is not strange that he consciously or unconsciously borrowed that used by the fish to protect its body. Covering a roof with small, flat units of stone, burned clay or split wood, and arranging these units in courses, but breaking joints, is only an adaptation of the scales on a fish. This kind of protection keeps out the weather, and yet is flexible enough to let the body of the house beneath it move. The rafters and side walls may settle, the wood may shrink, but the covering of shingles is

Samuel H. Gottscho, Photographer *Dwight James Baum, Architect*

Here the architect in the use of modern shingles has caught some of the qualities of the old hand cut shingles by laying them so that the lines of shadows made by the butt ends are wavy or broken. This arrangement relieves the monotonous uniformity that is always found with a product of the machine.

The Bergen Homestead, Flatlands, Brooklyn, N. Y. Built About 1655

The illustrations on pages 6 and 7 are excellent examples of the permanence of the "very old and picturesque cottages scattered throughout our land, which have been covered with hand-split shingles." They have been taken from the White Pine Series of Architectural Monographs.

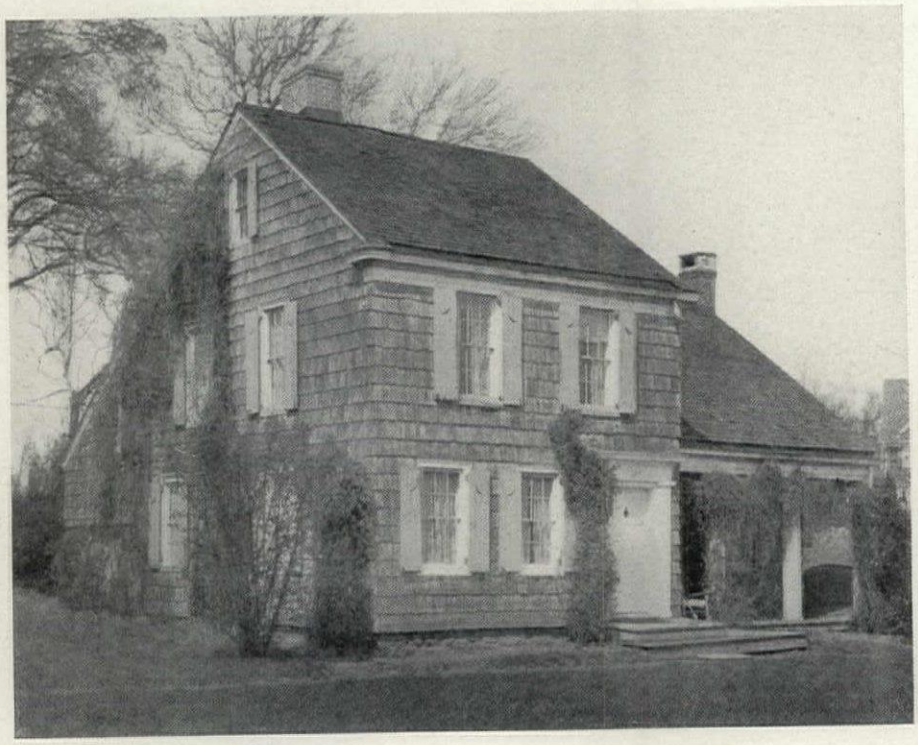
not broken, for each unit can slip a bit under or out from its neighbor. The expansion due to the heat of the sun and the contraction from the cold of night will not break the covering for the same reasons. We will never be able to improve on this method, even though we may manufacture new materials for the units employed.

Not only can we cover the roof with shingles, but we can safely apply them to the side walls. When the units are made of wood, we secure a type of wall covering which is unsurpassed in texture and color by any other material. It is a logical wall surface for a wooden frame, and has many advantages in its favor. Wall shingles are weather resisting, and can be left without paint to weather to exquisite colors. White cedar shingles take on a pearly gray that cannot be matched with pigments. Those made of redwood turn a rich brown that is the envy of the artist's palette. In the hands of the ingenious architect, the possible effects of color and texture with creosote stained shingles are many. When not laid too regularly, the shingles give the wall a softness of texture that cannot be reproduced by stucco, brick or wood siding.

Very old and picturesque cottages are scattered throughout our land which have been covered with hand-split shingles. They have withstood the ravages of hundreds of years. The irregular shapes and the unmatched thickness of the hand-split shingles give the walls of these homesteads a charm which is hard to duplicate in the modern counterpart, cut out with the saw. Splitting the shingles along their natural grain also gave them a resistance to the weather which we do not find in the sawn ones.

Yet it is possible to catch some of the qualities of the old hand cut shingles by laying our modern ones so that the lines of shadow made by their butt ends are wavy or broken. Such an arrangement will relieve the effect of monotonous uniformity inherent in any product of the machine. The weather qualities can be overcome by dipping the shingles in creosote stains. Even the picturesque, washed-out effect which old shingled walls developed, when the white-wash which had been applied to them gets old, can be imitated with creosote stains. But in doing all of these things considerable care and judgment must be exercised or else the artificiality of the processes may be too evident.

Shingle covered walls do not have the smooth, combed, horizontal lines of walls protected with siding. They give a more picturesque texture. The vertical joints continually counteract the importance of the horizontal courses, and if the lower edges of the shingles are laid in an irregular manner, the horizontal and formal appearance of the wall will be completely eliminated. Those houses covered with shingles that have been allowed to weather naturally fit into the landscape in an intimate way. The color blends with nature, for it is a natural shade, created by the sun and rain. The surface of the wood is broken down slightly. The softer parts are washed away, and a delicate grating of hard fibers remains like a veil over the body of the shingle. In certain lights, we see reflecting through this delicate net the golden tints of the wood below. Have you ever seen this richness of color on a shingled house in the woods as the last, fleeting rays of the sun have strayed through the trees to light up a patch here and there of the wall? If you never have, you cannot imagine it from words. The loveliest brown velvet never gave off such rich yellows, golds, reds, browns and grays. Have you ever watched the rippling light, reflected upward from the sea, in the early morning, dancing across a silver gray wall of cedar shingles? If you never have, you cannot picture it in your mind. Only the interior of some



The Tom Paine Cottage, Near the New York City Boundary

An Early Farmhouse, Near Boston

rare shell will show you the same silver and gray colors. The sand and the blown grass, the scrub pine and knarled cedars adopt to their own the house of cedar shingles as they do no other kind.

In addition to the beautiful natural effects which can be obtained with shingles, there are offered those innumerable opportunities of rich color which creosote stains produce. These colors, unlike paint, allow the grain of the wood to show and they give a surface which is almost rug-like in softness. A combination of harmonious browns, tans, reddish browns, and yellow browns may be used on the same wall by using shingles which have been dipped into these different tones. This mixing of various shades is often overdone, but, when good taste is used in the selection, many beautiful results are possible.

You do not need as many shingles to the square on the side walls as you do on the roof, for more of their length can be exposed to the weather. You can show as much as seven and a half inches as against four and a half on the roof. The choice of woods is wide, but red and white cedar, cypress and redwood are considered the most durable and satisfactory. There are, of course, different grades of shingles, just as with most building materials. For example, cedar shingles are to be obtained in four grades, A, B, C, and D. The first grade is suited to houses of quality, since in it only edged grain wood is used, which is the nearest that the sawed shingle comes to the old, hand-split shingle in durability. The lengths which are common are 16, 18, and 24 inches. The widths vary but the smallest permitted is 3 inches. They are sold in bundles of a thousand. In the best grades they are parallel, uniform in thickness and free from feather tips.

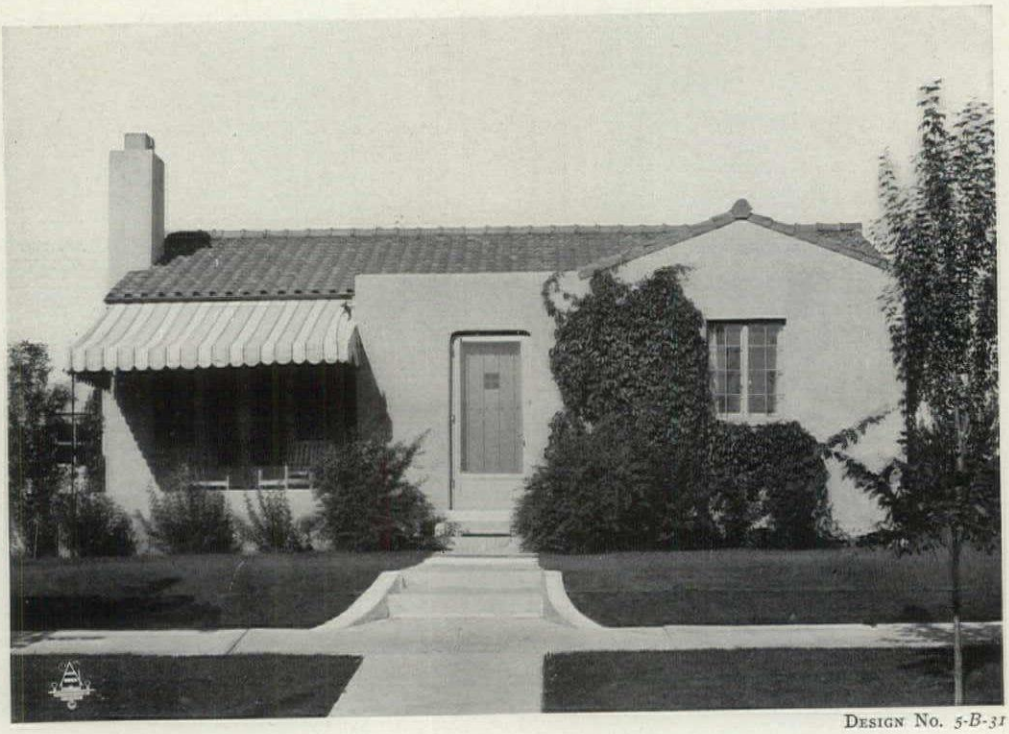
While one cannot stress too much the importance of using edge grain shingles, there are other requirements that must be met for durable construction. One of these is to use thick shingles. They should not be less than two-fifths of an inch in thickness at the thick end. They should not be more than eight inches wide. They should be laid a slight distance apart, and the nails must be of proper quality.

One of the most commonly neglected features in laying shingles is this matter of nails. Good shingles should be laid with nails that are absolutely rust resisting. The ordinary wire nail will last ten or twelve years, but a rust resisting nail, such as one made from galvanized cut iron or wire, zinc coated, will last many times longer. Often the shingles are blamed for a faulty roof or wall whereas in reality the nails are at fault. Certainly it is folly to attach a high-grade roofing material of the best wood shingles with cheap nails which will rust out in a short span of years and allow the shingles to work loose. For this reason we stress the use of rust proof nails.

Now, when shingles are laid on roofs, it is customary in some localities, to nail lath on the rafters, so that the undersides of the shingles can be aerated and kept from rotting in dampness. However, this is not possible when they are laid on the wall, for cold air would then leak through too fast for comfort. Sheathing boards, nailed with tight joints, and covered with waterproof building paper make the proper base for shingles that are put on walls. Sometimes laths are nailed on top of the building paper and to these the shingles are fastened, in order to allow air to circulate under them; but a better method of getting the utmost durability is to have them dipped in creosote before they are laid. Properly treated in this manner, their life will be about doubled. If, however, they are painted with creosote, after they have been laid, we must be absolutely sure that they are thoroughly dry, otherwise the creosoting may do actual harm. That is one of the advantages of buying factory dipped shingles, since accidents of this kind are eliminated. But raw, untouched shingles of cypress or cedar are extremely durable on the side walls, and they take on colors which they never would approach, if dipped in preservatives.

So, you see, the structural principle of using small units of any suitable material to cover the walls of the house is as sound as the scales on the fishes. The water is shed, but the body can move without cracking or tearing the protection.

The Anna Halsey House, Watermill, Long Island. Built About 1800



DESIGN NO. 5-B-31

FIVE ROOM MASONRY BUNGALOW

Italian Exterior Detail On An American Plan

SMALL house architecture in America has a quality of its own. We do not always call it American. Perhaps the only style given an American name is the Colonial, but when we have done with the designing of a house having details taken from the Spanish, or English, or Italian so much more has been added to meet the requirements of home life in this country that the result is truly American.

Design 5-B-31 illustrated here is typical of what happens to an Italian cottage after it has been transformed by American designers. We may call it Italian, but it is really American, and in making it our own we have not hesitated to borrow the Italian's close clipped eaves, his roof of tile, the casemented windows, the arched entrance, as shown in the house on the cover, the plain stucco walls. There is probably no such house in all the Mediterranean countries. But that is their loss, for here is a home of charm, of individuality, with a beauty of line and proportion, and with a plan of such direct convenience that any nation might be glad to call it its own and be proud of its craftsmen and designers.

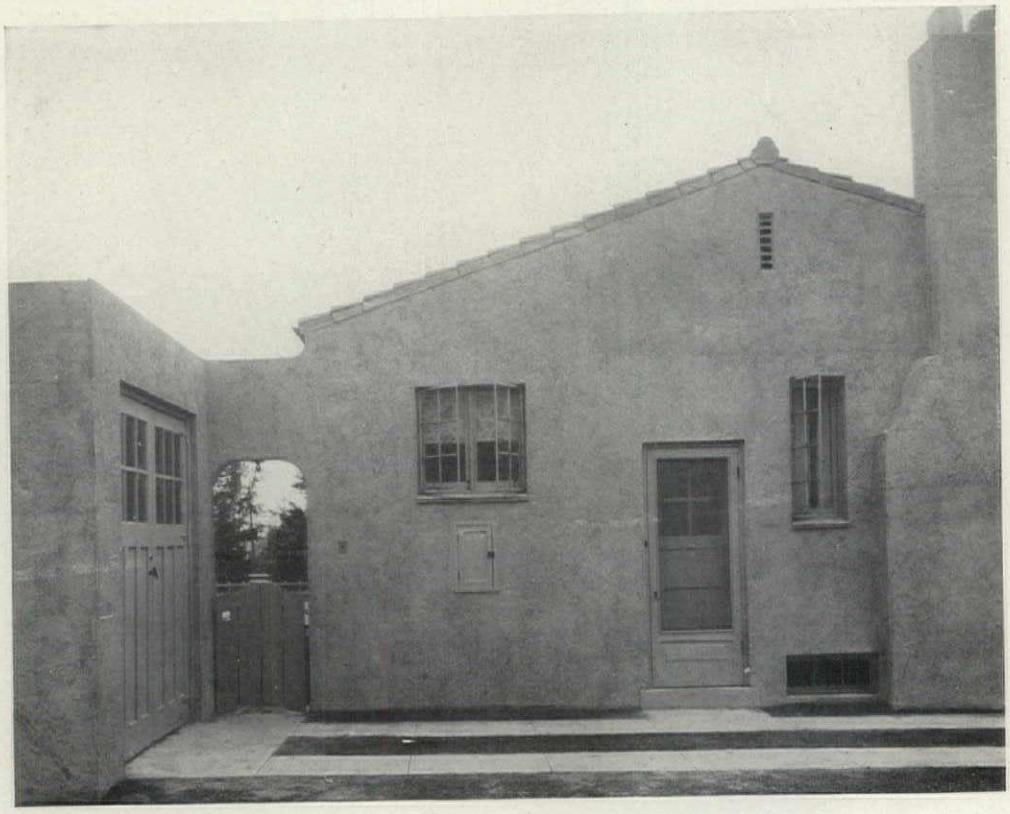
Tile is used freely throughout this house. Everyone is familiar with the use of tile as a substantial and durable material for the construction of exterior walls, but in a different form it has great possibilities for decorative effects. In interiors of homes, tiles are appropriate in many rooms and constitute a background for furnishings correct in color, texture, scale and pattern. Because they are in small units and can be assembled in an almost endless variety of ways, they possess a distinct originality and individuality. Colors, tones, and varieties of tiles can be selected and applied to suit many different kinds of surroundings and spaces.

From a purely practical standpoint, tiles are even as durable as they are beautiful. Their colors do not fade; their surface does not wear off; and they retain their original freshness and attractiveness with only an occasional wiping with a damp cloth.

In a small home, the most frequent use of tile is in the fireplace, bathroom, and vestibule, and occasionally in the floor and wainscot of the kitchen and laundry. Tiled floors in the living room and dining room are becoming more popular. Porch and terrace floors are now tiled for ultimate economy as well as for beauty in appearance, for the first cost is the last.

The tendency today is toward greater use of color. Shades of tan, blue, yellow, gray, and green are particularly satisfying, and any result may be secured from a simple neutral pattern to an elaborate design incorporating vivid and positive colors.

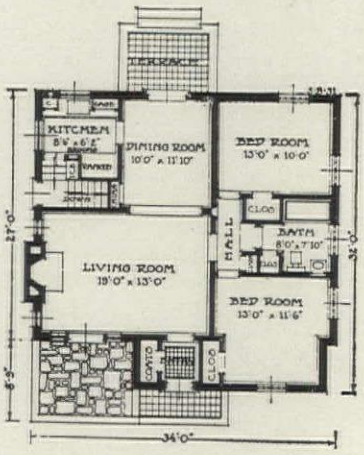
In the small home shown here the roof is covered with tiles in variegated reds and tans.



Kitchen entrance, garage, and garden gate are shown above. The small door below the kitchen window is a package receiver. The casement window at the right of the entrance is one of the pair shown in the drawings on either side of the living room fireplace.

Large red quarry tile ornament the vestibule floor, and the bathroom floor is laid in tiles of black and white. Dull red tones of tile in the hearth of the fireplace add color and texture to the living room. The home builder, of course, may find it desirable to use the tile in other ways, or to omit it entirely from the exterior, but this is a matter of personal taste and of the amount of money he wishes to spend.

Opening off the living room is a flagstone terrace, which in the summer time may be covered with an awning. The living room may be entered from this terrace or through the vestibule at the center of the house. The living room is divided from the dining room by a wide arched opening. The ceiling of the living room is higher than that of the other rooms, giving it the proportions due a room with so large a floor area. The



vista from the front door of the living room carries through the dining room and on to the rear across another open terrace, thus giving an aspect of spaciousness unusual in a house of this size.

The kitchen is scientifically small. Everything is within easy reach and stepping distance. The range is set within a recess so that it does not protrude into the kitchen, and above it is provided a hood to carry off the fumes and odors of cookery. The refrigerator is accessible from the grade entrance. A closet takes care of brooms and cleaning implements. Adequate cupboards flank the sink. Into the corner cupboard is built an outside door for keeping foods chilled in cool weather. Notice also the built-in china closet in the dining room, the linen closets in both hall and bath room, the recessed bath tub, the niche for the telephone in the hall between the bedrooms, the cloak closet off the vestibule.

The house is planned to be built with walls of solid brick or hollow tile with stucco finish.

The kitchen is modern and efficient, with all the conveniences that make housework a pleasure. The gas range is set in an alcove, where it does not project into the working area. The walls are painted a warm gray and the woodwork finished in white enamel.

The windows are outswinging casements, and may be either steel or frame. The drawings show steel windows.

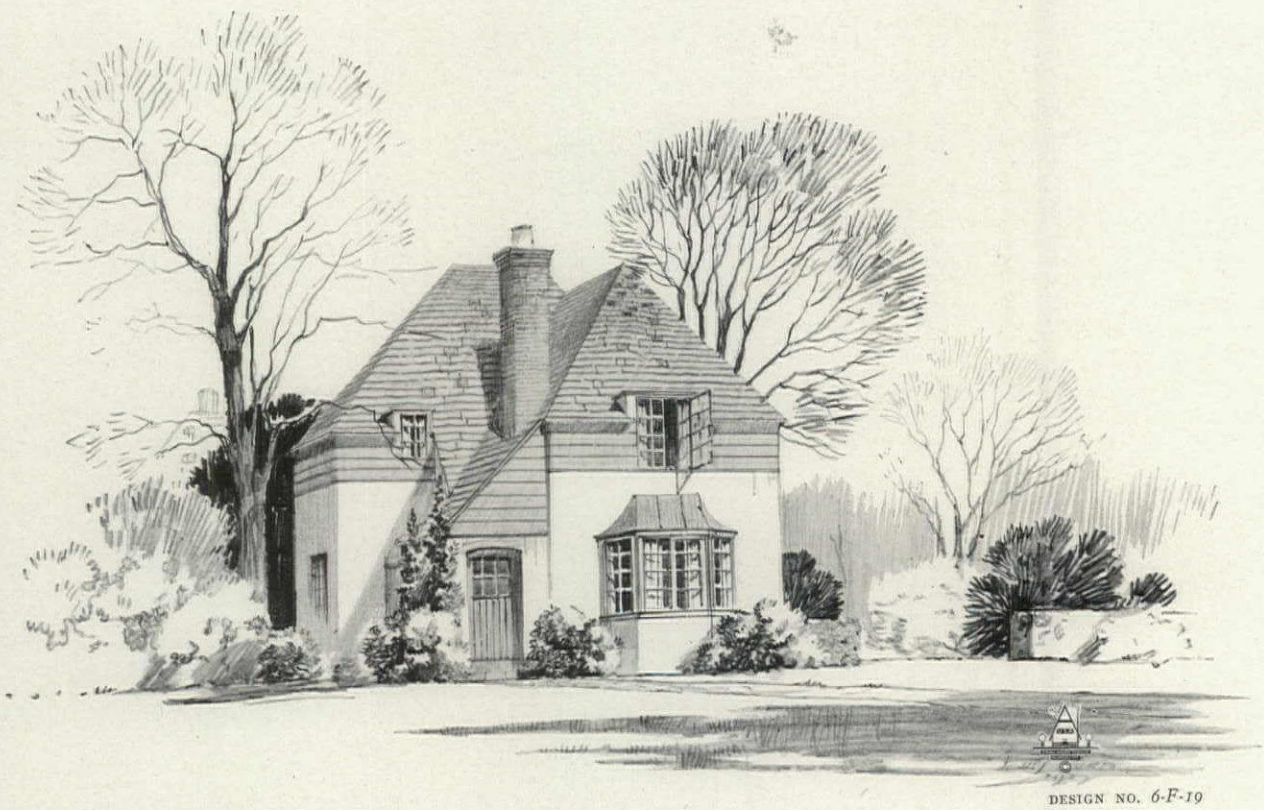
A number of pleasing color schemes for the exterior may be worked out. The walls may be finished in white stucco, light gray, or gray green, with a roof of variegated tiles in harmonizing colors. The doors should harmonize with the roof.

Lot size: This house will go on a lot as narrow as forty-five feet, but of course the more ground the better the setting.

Facing: Designed to face south or east. Reversed drawings may be secured for other exposures or to take advantage of peculiarities of the lot.

For price of plans and statement of service turn to page 38.

The mantel in the living room is copied from an old Italian fireplace. It is made in cement and moulded while moist by the workman's hands. Painted a light buff color and then overglazed with blue, it produces a pleasing two tone effect.

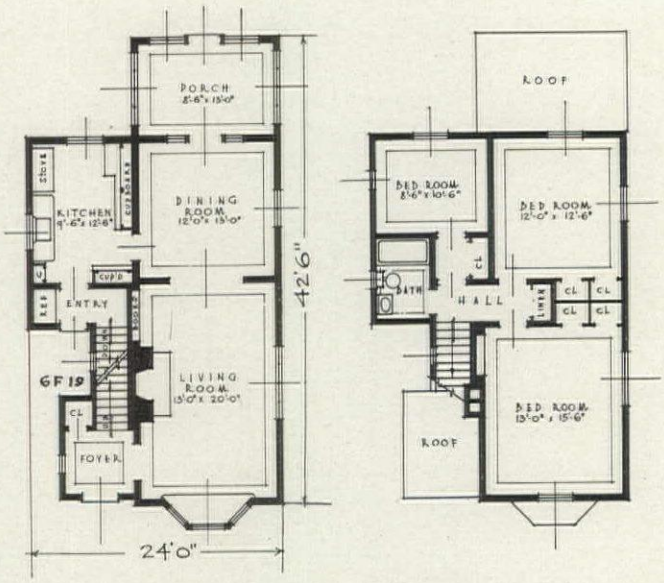


DESIGN NO. *6-F-19*

A STUCCO HOUSE WITH INGENUOUS PLAN

A Handsome Exterior, Beautifully Arranged Rooms, All Designed To Make The Most Of A Narrow City Lot

THE working out of a design of a six room house for a narrow lot requires real ingenuity. Of course, the exterior must be beautiful. No one wants to build a homely house. And yet what chance has the average narrow house to be beautiful? The restricted width of the front and the extreme depth of the side give a frame essentially of ungainly proportions. Yet since there are many narrow lots, narrow houses are inevitable. Here the designer, by the careful massing of the roof planes, and the insertion of dormers at just the right places, has given us a contour of striking individuality. He has given the house further vivacity by a happy use of contrasting materials. Such an effect could only be obtained by an artist.



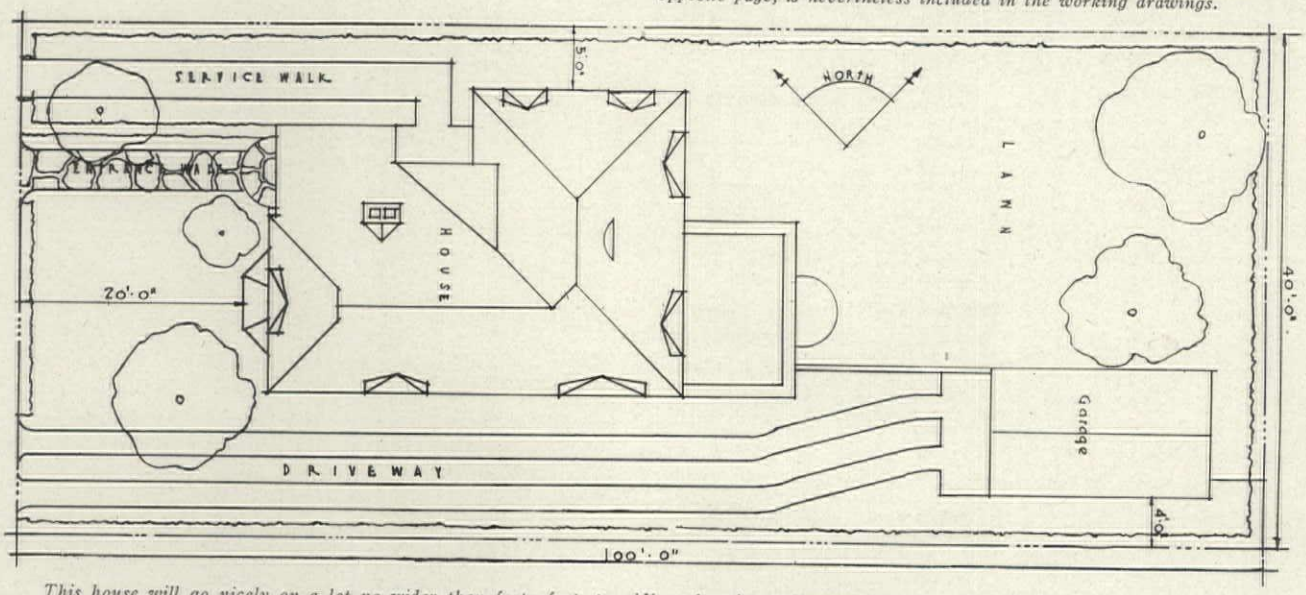
In a house designed for a narrow lot, the plan necessarily must be somewhat long, with the rooms in line, one behind the other. Here a distinct advantage has been made of this necessity. Living room, dining room, and porch, placed in line, are separated by wide openings, forming one long vista, which at once increases the apparent size of the rooms and gives a most pleasant architectural effect. The feeling of spaciousness is further accentuated by the wide groups of casement windows and the glazed porch at the rear.

Another interesting feature is the arrangement of stairway and kitchen entry. The placing of the basement stairs directly under the second story stairs is economical of space and materials. The entry to the kitchen places the ice box where it is readily served and gives a desirable entrance to the basement without passing through any part of the house. The kitchen has good cupboard space, well disposed. The long, narrow shape of this room makes it especially convenient, as every housewife knows.

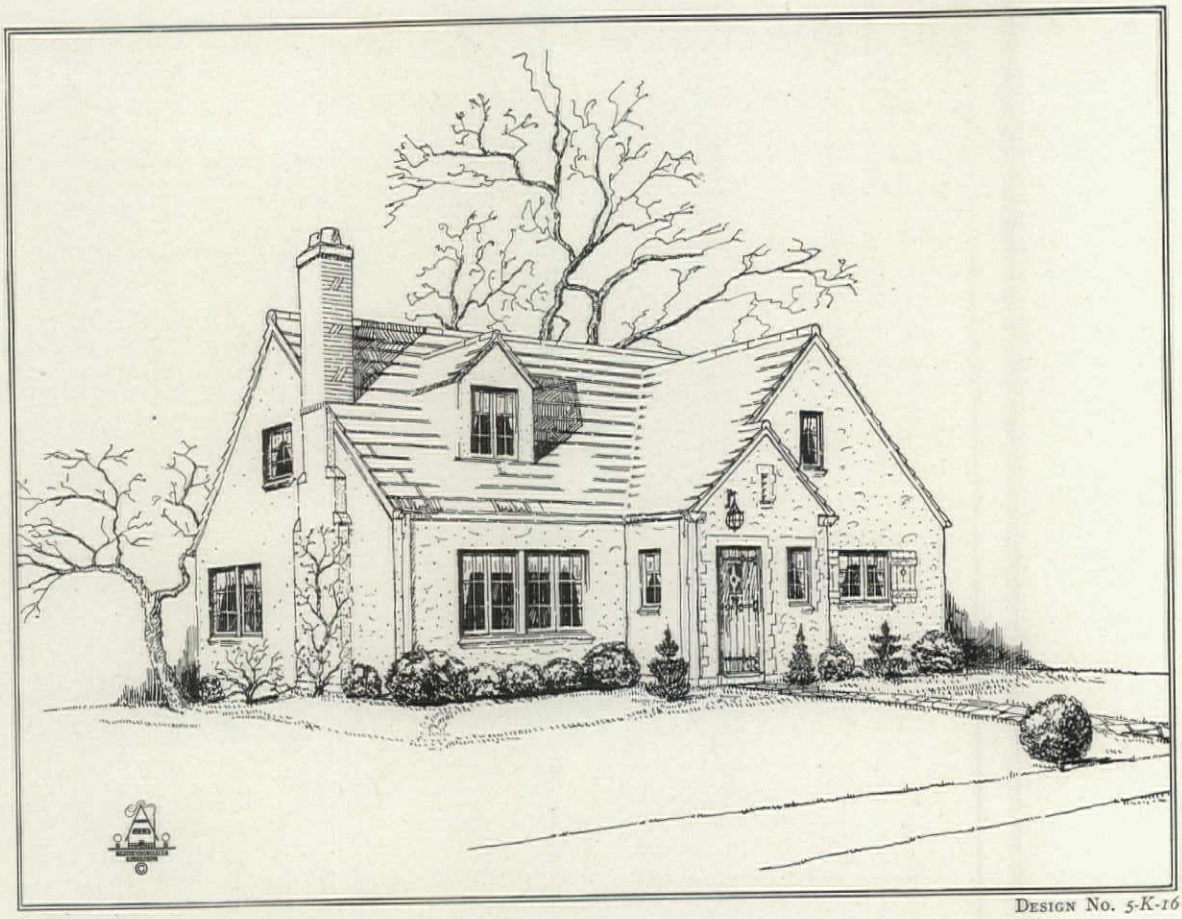
As indicated in the sketch, the house is designed for stucco over wood construction with a brick chimney. The roof is of shingles and the casement windows of steel, though they may be frame. In the finish of the walls, the combinations of textures and colors of the various materials is of utmost importance. The stucco should have a fairly smooth surface, and it may have one of a number of tints—warm gray, light buff, or the faintest pink. The bands of rough sawn siding or shingles under the eaves should then be stained to match or in a contrasting color, not as dark as the roof. The door should be of oak, which may remain natural color, or it may be stained oak color.

The dormer above the living room bay window has a way of nestling back into the roof, suggesting coziness within.

The doorway and windows to the sun porch with their many small panes make a delightful transition between house and garden. The low stooped front entrance in the upper right hand corner, although of somewhat different design from the one illustrated on the opposite page, is nevertheless included in the working drawings.



This house will go nicely on a lot no wider than forty feet, providing the city ordinance permits, and still allow ample room for a driveway at the side. The open view from the living room, through the dining room and sun porch, has been especially designed for a lawn or garden at the rear.



DESIGN NO. 5-K-16

GRACEFUL COTTAGE OF GOOD PROPORTIONS

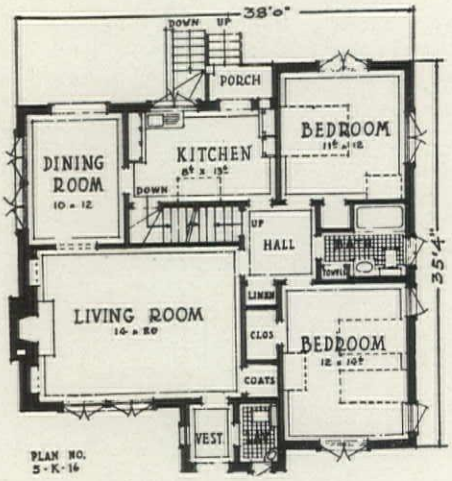
To Be Built Of Concrete Masonry Walls With Stucco Finish

FIVE room bungalows have long deserved wide popularity. They are economical to build, give much accommodation, and are in better scale with the cottage idea than bungalows of larger size, which necessarily must spread out more extensively.

The bungalow illustrated here, Design 5-K-16, is remarkable both because of the skillful way in which the plan is worked out and because of the extremely pleasing exterior.

The home builder will wisely consider all the details of the plan, noting the way the rooms are arranged, the large number of windows, the amount of wall space, and the equipment afforded. In this way only can he visualize the particular advantages of this house.

Taking up each room by itself, we find first of all the vestibule. Here is a lavatory, which, though extremely convenient, may be omitted if necessary to economize. Immediately beyond the vestibule, in the living room, is a coat closet. The living room, twenty feet long and fourteen feet wide, is of good size. The uninterrupted wall spaces are ample for large pieces of furniture. At one end is a handsome fireplace, flanked on both sides by bookcases.



At the front is a broad window opening with four casement sash.

Through a plaster arch we pass into the dining room. This room is ten feet wide, twelve feet long, and is bountifully lighted with four casement sash along the side and with French doors opening to the garden terrace at the rear.

A swinging door opens directly into the kitchen, which is equipped in modern style for greatest efficiency. Immediately inside the door is the china closet. Below are drawers for cutlery and below these bins for food. Immediately at the right is the sink. This is placed directly under broad casement windows, insuring for this working center excellent lighting and a minimum amount of moving about for the person who must work here.

Passing the kitchen to the bedroom hall we find at the front a bedroom twelve by fourteen feet, in which may be accommodated twin beds. Three window openings light and ventilate this room and there is a generous closet.

To the rear is the bath room with a recess tub, towel closet and the other usual fixtures. The rear bedroom is also of good size, twelve feet wide by eleven feet six inches in depth with broad windows to insure cross ventilation.

The exterior speaks for itself. It is gracefully designed, beautifully proportioned, having the quality of concrete masonry for which it was designed to be built. The exterior finish is of textured stucco, roof of tiles or slate.

Construction: Exterior walls of concrete masonry, stucco finish.

Size of lot: Approximately 50 feet.

For price of plans and statement of service, turn to page 38.

THE BUILDING AND LOAN ASSOCIATION

How It Helps The Family To Own Its Home

By H. A. SIMONS

MOST renters probably wonder many times a year, "How can the money I pay out for rent be changed from sheer expense into an investment?"

This question often leads to another, closely akin to it: "How can I buy a home on monthly payments no greater, or but little greater, than the rent I pay?"

There are four possible answers. First, you can save about half the sum required, borrow the other half on a first mortgage, then get your home and set aside enough each month to pay off the mortgage when it comes due (which usually is three or five years)—or maybe you will pay only part of it and renew the balance for another period of years.

Second, you can save about one-quarter of the amount you need and borrow half on a first mortgage and the rest on a second. The second mortgage you will pay off on the installment plan. Probably when the first mortgage becomes due, you will renew it—"let it take care of itself when the time comes."

Third, you can buy a house on contract from a builder or real estate man, your contract binding you to make a "down payment" and then to pay interest and a monthly installment on the principal until the debt is cleared. This seems just what you want, but you know that you will have to pay the seller a goodly profit for the terms he gives you.

IGNORE the fourth possible answer to your question for a moment, and you will face another problem: "In each of these plans for acquiring a home, a fairly large sum is required to start with; if I go on paying rent, it will take me years to save that amount. How can I actually get into my own home without going through those years of struggle?"

Strictly speaking, there is no way out of this dilemma. You have to save some amount, in some way, before you can get the home you want. Most family budgets are so full of every-day necessaries that they prompt the question, "How can I save out of our limited income?" What they want is a painless method.

Moreover, if you have a "money sense" by which you realize how dimes grow into dollars and how dollars propagate their species, you will want an answer to the question, "How can I save so that the money earns the most interest and is, at the same time, absolutely safe?"

First and second mortgage men and builders or real estate dealers cannot help you here. But we said there was a fourth answer to your question, how to get a home on monthly payments no greater, or but little greater, than your rent. It is the building and loan association. It supplies answers also to these later problems.

There are many other important facts about building and loan associations which the prospective owner of a small house should know. What is given here is a mere sketch of the plan. This outline will be filled in by future articles.

MR. HORACE F. CLARK and Mr. Frank A. Chase of the American Savings, Building and Loan Institute, define a building and loan association as "that form of co-operative savings institution, the funds of which are invested primarily in long-time loans on real-estate security," adding, "Most of them are mutual savings institutions. Most of them loan only on homes."

—Which means simply this: A building and loan association is comprised of members who save a little each month, put all their savings together and lend them to members who want to build or buy homes, and then divide the profits from such loans among each other.

Now, let's suppose that you join such an association, and see exactly how it works at every point of your dealings with it. As we trace these workings, the answers to your several questions will be disclosed. In watching the association work, we will follow the description given by Dr. Clark and Mr. Chase in their book on "Elements of the Modern Building and Loan Associations," which is a classic on the whole subject.

Just suppose that you want a home so intensely that you accept a program of great self-denial in order to set aside $25 a month. (This may be supposing *a lot;* but we will take this figure arbitrarily —the principle is the same whether your monthly savings are $25 or $2.50.) You want to put this where it will yield you more than the interest your local bank pays on savings accounts but where it will be just as safe as in a national bank.

Building and loan association memberships do pay, on the average, a higher rate of dividends than banks pay on savings deposits. But are they as safe? Yes, and safer. According to the national Comptroller of Currency, 5.71 per cent of the national banks in existence over a period of 60 years failed. In these failures the creditors received an average of 84.03 per cent of their claims. Over a longer period there have been only 88 failures of building and loan associations —less than 1 per cent of the total number operating in 1924. In 1923, for instance, there were five failures—one-twentieth of 1 per cent—in which the losses totalled seven one-thousandths of 1 per cent of the total assets.

Fairly convincing; isn't it? So, for this greater safety and higher rate of interest, you go to the office of a building and loan association and, instead of "opening an account," become a member. You learn that the membership-shares in the association have a "par value" of $100, that the monthly payment required is 50 cents a share and that, within certain limits, a member may "take out" as many shares as he can pay for.

ORDINARILY, if you merely desired to save, you would convert your $25 a month into payments on 50 shares of stock. At the end of 200 months you would receive the full value of your paid-up shares, $5,000, *plus the interest*—or, at the end of a *shorter* time, you would receive the $5,000 without additional interest.

But this won't meet your present situation. You want to put your savings into a home long before the end of 200 months of self-denial to the tune of $25 a month. And the chances are that your building and loan association can accommodate you. There are several different kinds of shares which will be discussed in due time, so that you can arrange a savings plan that will suit your particular budget and solve your particular home-buying problem.

Here, then, is an answer to your question, "How can I save out of a limited income?" The association helps by getting you to save regularly. If you have a definite motive for saving something, no matter how little, out of each month's income, you will find it easier to accumulate money than if you merely decide to put aside what is left over from necessary expenditures. The duty to pay a definite sum on your association shares supplies that motive.

Suppose, now, that you save $1,800 by this method. You want to build a home for a total cost of $5,000. You could borrow $2,500 on a first mortgage, and the remaining $700 on a second. But you would have to pay a fairly large discount for the second mortgage, and you would face paying off the $2,500 in one lump sum

(Continued on Page 28)

He bought the lot as it appeared, with a luxuriant growth of weeds, . . . but when the weeds were cut he found—

WHAT ELSE DO YOU GET WITH YOUR LOT?

Do You Get Trees, Views, Good Neighbors, Easy Transportation

By ROBERT T. JONES, A. I. A.,
Technical Director, The Architects' Small House Service Bureau

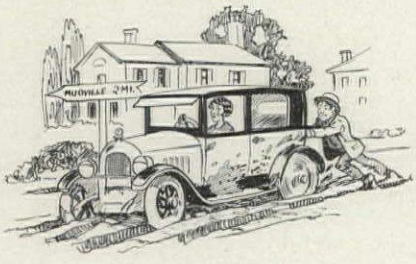
WHEN you buy the lot for your home do you get anything more than so much ground area? The answer lies close to your interests, for a real home is more than a number of rooms skillfully planned and furnished.

Think of your home for a minute in a most general manner. That is easy enough for most of us since dreaming costs us nothing. Try to picture it as a whole. There is a low lying familiar building, always rambling outside the limits of your pocketbook, flanked by trees, open turf, gardens, flowers. There is privacy. You do not think about fireplaces, closets, bathrooms, kitchens. You think only of the setting. If you had been inclined to draw out the picture further you might have thought of schools, streets, neighbors, but not a single thought about heaters, porches, bookcases. That is a sound basis on which to start. Let us follow it through.

"Put no trust in corner posts set by previous owners. They may be right, or they may be wholly wrong."

The modern high class real estate man is a scientist. He has studied all the factors that contribute to value in properties. When he analyzes land area he can fairly estimate its real value. Understand, I do not say price, because that is a totally different matter. In determining value he goes through all the factors that make the property what it is. Here are some of his processes.

First, he thinks of the general location of the property, whether or not it is in an area of high or low land values such as may have been established in the district. Then he thinks of environment, which is just another name for the character of the neighborhood. Environment has to do with schools, playgrounds for the children. Under environment he also considers shade trees, the planting about the property, the setting of the house with reference to the direction of prevailing winds, the lay of the property as to whether or not it must be graded, filled, or drained. Then he thinks of the legal restrictions that lie against the property for its protection, what provisions are made in the zoning laws to protect the property from depreciation through the erection of undesirable buildings nearby, and what fire and police protection is afforded. These all have a bearing on setting.

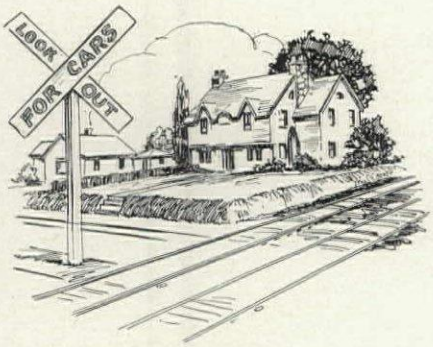


". . . if the roads over which you have to drive get themselves transformed into quagmires on every minor provocation."

After the land has been evaluated in this way, the real estate operator thinks of a particular piece of property from an investment point of view. He has an item of "trend" to which he gives consideration. By trend is meant the price classification into which the property is likely to work. The property may be high priced now. Will it become still higher, or will it tend to become lower.

He takes the "history" of the property into consideration—the clarity of its title. If a clear deed cannot be obtained, he may consider the property an extremely hazardous investment.

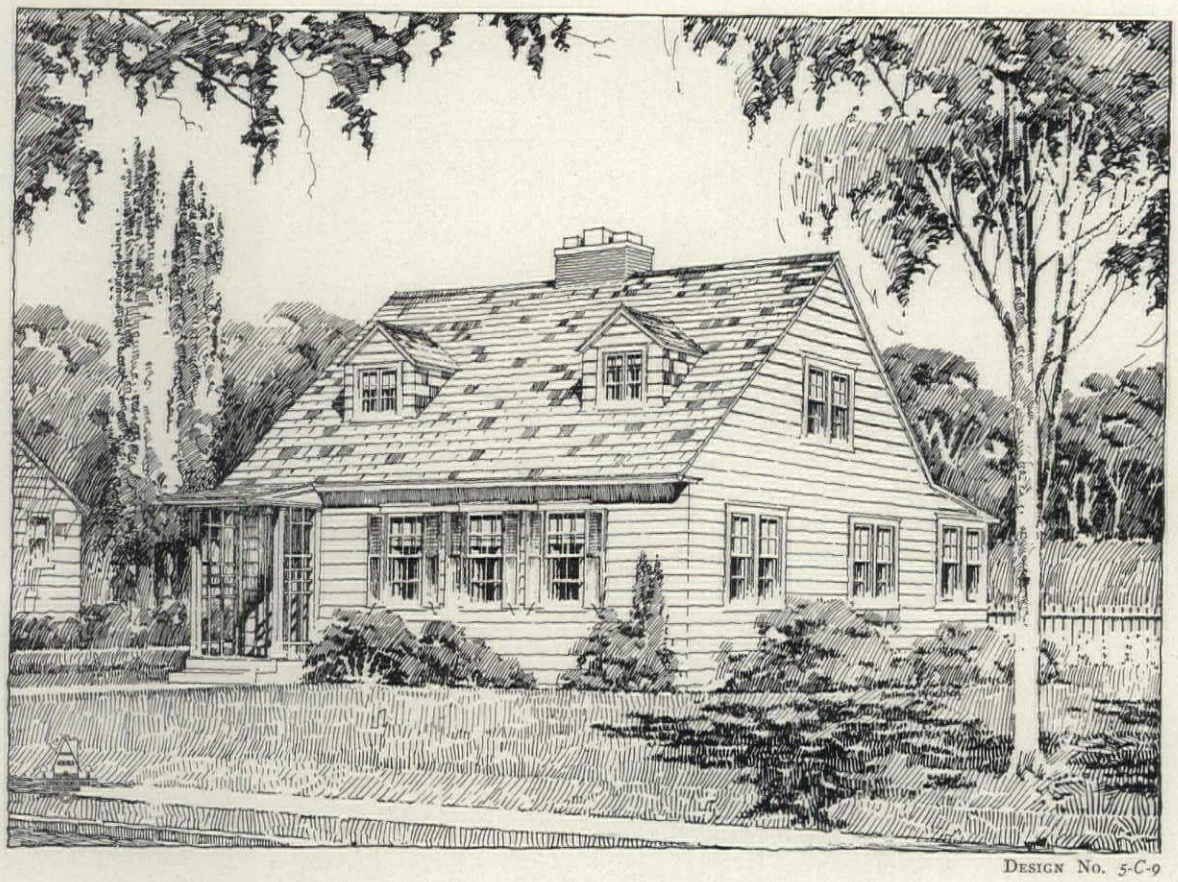
Perhaps the real estate man does not think of neighbors at first, but you as a home owner have serious cause to think of them. Even if it is not always possible to live near relatives or close friends you may be justified at least on a reasonable insistence that Mr. Neighbor will not poison your favorite dog or make himself too disagreeable when the children tramp through his best flower bed. Then what about the neighbor's children? They must be the kind that will not tramp through your flower bed, though you are willing to be reasonably moderate about that. The children of the neighborhood will gang up. That is inevitable. Is it likely to be the kind of gang you can countenance for your own offspring? Thinking of your house and its setting can you avoid bringing your neighbors into the picture?



". . . now he has a railroad at the side of him . . . He would gladly sell his home for less than he paid for it."

When you think of children you are led inevitably to think about schools. If your house is to be located where children must cross busy thoroughfares and railroad

(Continued on Page 26)

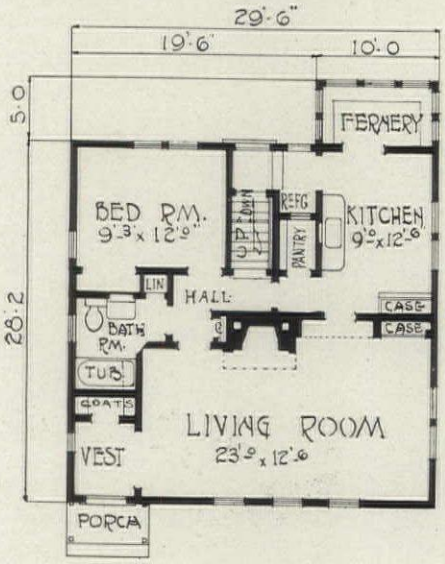


DESIGN NO. 5-C-9

WHEN A DINING ROOM IS NOT NEEDED

Other Corners Make Pleasant Dining Places

HOW pleasant is a large, well proportioned living room, and what a luxury it becomes for the small home builder, for few of the small and inexpensive homes have them. In design 5-C-9 illustrated here, the fine large living room is obtained not by increasing the outer dimensions of the walls, and thus the expense, but by omitting the dining room. Meals for the family may be served in a sunny corner of the kitchen, or in the fernery, a delightful little room with windows on three sides. Or if there are guests, what could be more charming and informal than a table set in one end of the living room with a fire blazing cheerily in the grate.

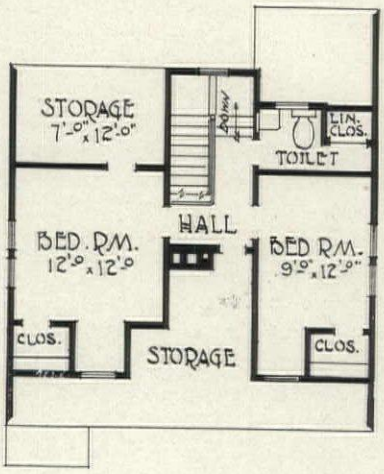


Another very convenient feature of this house is that the first story is complete in itself. If funds are limited and the family is small, the second story need not be finished. There is a bedroom on the first floor and a hall that leads directly from the bedroom to the bathroom and linen closet. Moreover, the bedroom and bathroom are so separated from the living room and kitchen that there will be privacy. If the second floor is finished, it offers two bedrooms, each with good closet space and cross ventilation, a lavatory with a large linen closet for second story supplies and two huge storage spaces under the roof.

The basement makes provision for laundry, furnace, fuel room, and storage space The central chimney, it will be noticed, has three flues, one for the furnace, one for the fireplace, and one for a coal burning range in the kitchen. If a gas range is used, the third flue may be omitted. The refrigerator is most conveniently placed with respect to the outside entry at the head of the basement stairs and also to the kitchen, where the housewife prepares the food. The kitchen is well lighted, having not only a large double window on the outside wall, but the possibility of floods of light and sunshine from the fernery.

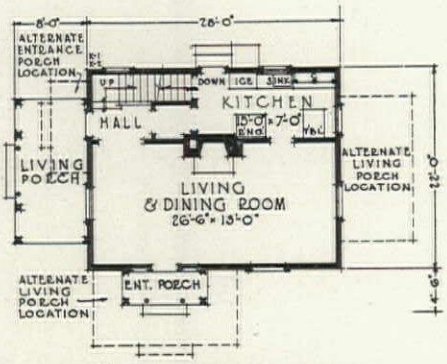
The exterior is exceedingly simple. It has been designed for the family who wish to keep costs as low as possible. But it has a good deal of charm. The proportions are essentially good. The lines are easy and have a just-right feeling. The house is low, and clings to the ground, as all small houses should, in a homey fashion. Then for trimming, there are

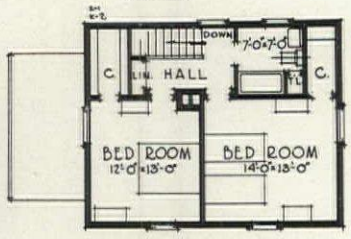
(Continued on Page 30)

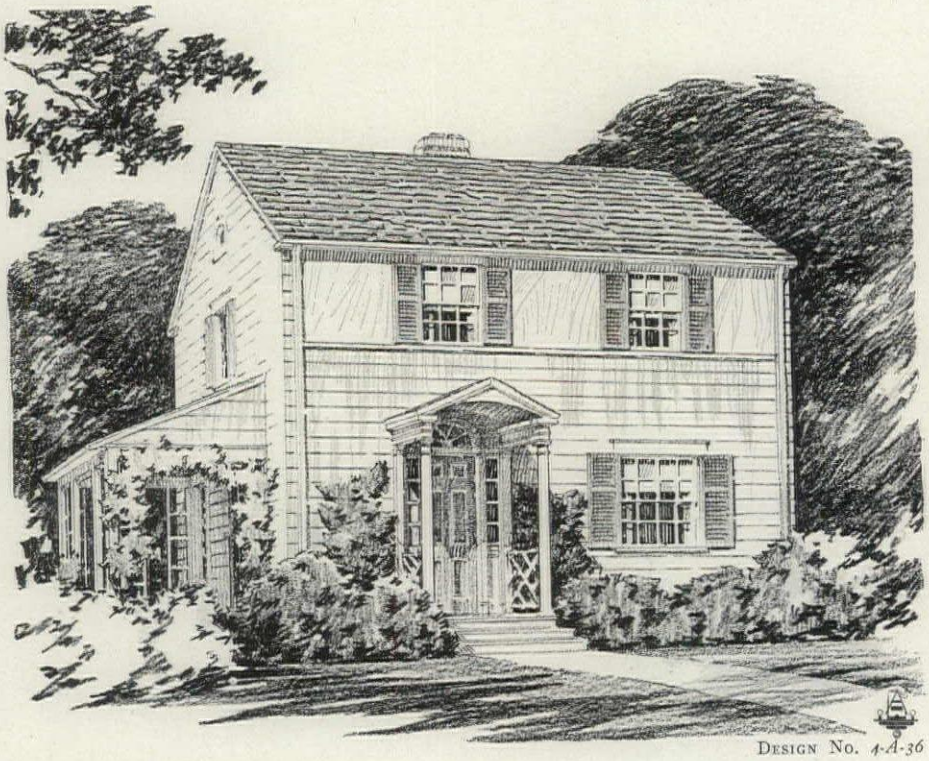


TWO EXTERIORS FOR A FLEXIBLE PLAN

Very Small Houses May Be Roomy And Beautiful







DESIGN NO. 4-A-36

THROUGHOUT New England one will find many houses that look like design 4-A-36 on the outside, with its distinctive stucco panels starting at the level of the second story windows and spreading to the corners. The trellises around the side porch furnish a setting for vines and flowers. Houses such as this, from their very simplicity, lend themselves favorably to landscaping.

Design 4-A-37, with its quaint bonnet roof and combination of shingles and stucco siding, is of English leaning. The entrance and the side porches are railed with scrolled-out spindles and tapered posts. Window panes on each side of the front door and in the door itself furnish additional light to the living room, which, you will observe, has outside exposure on three sides.

Meals before an open fire are luxurious moments for most of us, opportunities that are had only too rarely. To the person who lives in one of these homes, such opportunities are always present, for the living room and dining room are combined into one large room, where the dinner table may be set as near the fire or as far from it as one desires.

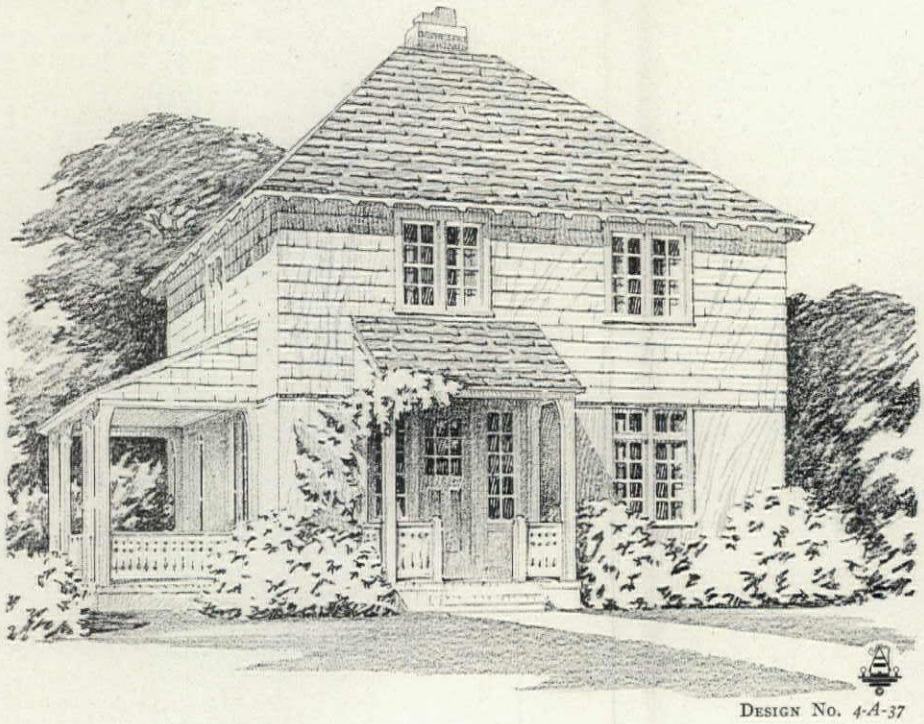
One of the features of this plan, seldom found in a plan of so small a house, is the hallway leading directly from the kitchen to the second story, through which one may pass without entering the living room. One may also enter this hallway from either the grade entry or the side entrance and pass upstairs without disturbing members of the family in the living room.

The bedrooms are well proportioned, neither too small nor too large for economical construction. Though the plans show twin beds in only one of the bedrooms, both are large enough for this arrangement. In fact, the closets are really built for two, each one having shelf room as well as ample wall space. The linen closet is conveniently located with respect to the bathroom and the bedrooms.

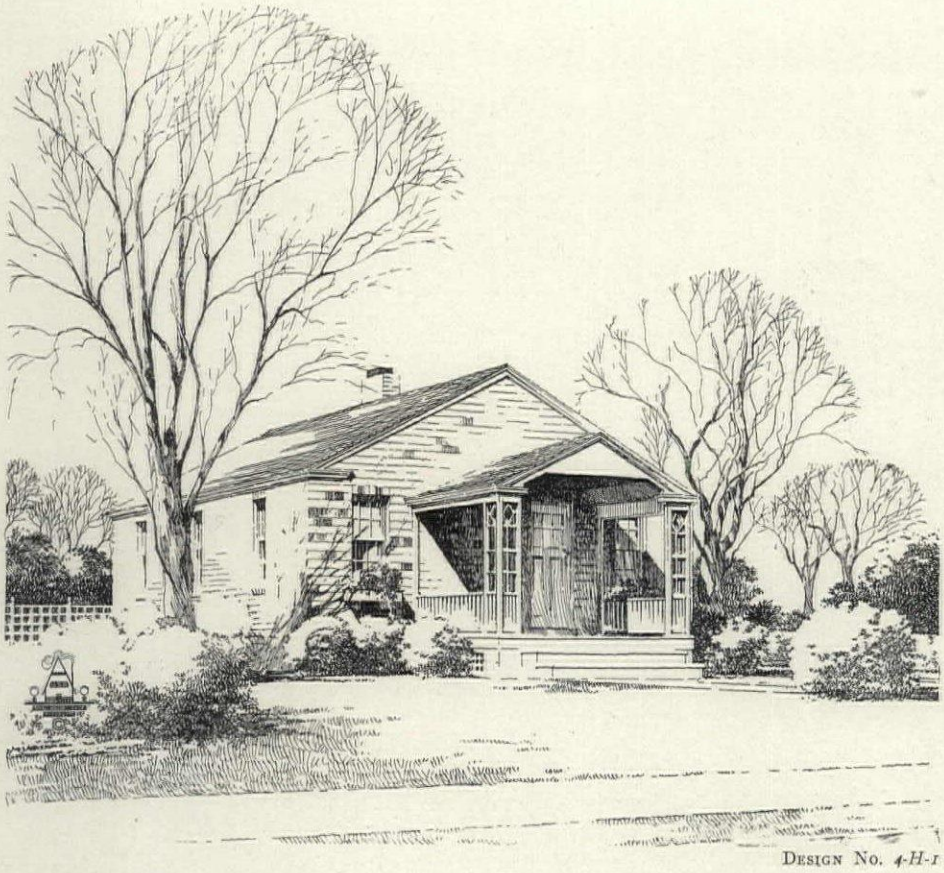
The bathroom is provided with a convenience not often found even in larger homes. This is a built-in towel closet, which is so divided that each member of the family may store separately his supply of towels and washcloths.

In studying these designs, the thing that strikes one most forcibly is the possibility of economical construction. The contours are rectangular, though pleasing. The materials that go into the construction and the finish are of the simplest, wood,

(Continued on page 30)



DESIGN NO. 4-A-37



DESIGN NO. 4-H-1

THE AVERAGE MAN'S HOME

Reduced Building Costs Without Sacrifice of Appearance or Durability

THIS simple and attractive one-story cottage reminds one of some of the charming and much admired old rural cottages, the walls of which were built of stones of small size. Here, however, the walls are constructed of structural tile, a modern material. The exterior surfaces of these units have a pleasant color, and they may be had with a plain surface or with an agreeably textured surface. Stucco for an exterior finish is unnecessary. These tiles are set with broken mortar joints, insuring a well insulated wall.

Inexpensive houses of this type are receiving more and more attention. Home builders who must be most economical about their homes if they are to build at all, so that their investment will not run up such heavy charges as to represent a disproportionate part of their income, are finding in houses of this sort a solution of their problem.

Although this house does answer to a certain extent the present day question of high building costs and upkeep, it has been designed so carefully that it provides fully for the necessary requirements of space and accommodation. The rooms are of good size, well fitted out. Here, as in many small houses, we have the application of the apartment house principle

to the separate dwelling—small floor area, compact equipment, no waste space, plenty of conveniences.

From the porch one enters a well lighted living room which overlooks the front lawn and the side yard, and with wall spaces well suited to the placing of comfortable and necessary furniture. Beyond the door at the rear of this room is the dining alcove with its built-in seats, table under the window, china cupboard, and a useful "pantry" closet. All this is but a step or two to the rear to the neat, well lighted, and efficiently arranged little kitchen. Here, within easy reach, are the stove, the sink placed directly under the window, the cupboard in the corner, and space for the work table. The rear yard is seen from the rear window. Below this window is a door to the grade entry.

Returning to the dining alcove or the living room, one may enter directly the hall in the center of the house. From here it is but a step into the well arranged bathroom with its built-in tub, or into the front bedroom overlooking both the front and side yards, or into the rear bedroom which overlooks rear and side yards. Large linen and coat closets are conveniently placed in the hall, while in each bedroom there is an additional closet. In the ceiling of the hall, as the plans show, is a disappearing stair, which may easily be drawn down to permit trunks and boxes to be carried into the storage space above.

Lot size: Approximately thirty-five feet.

Facing: Designed to face west or north. Reversed plans may be secured for other exposures or to take advantage of peculiarities of the site.

For price of plans and statement of service turn to page 38.

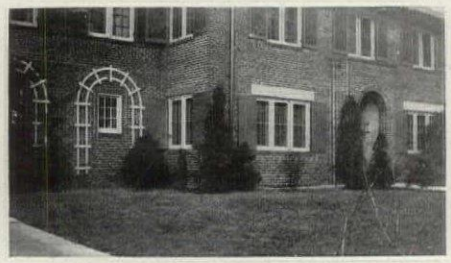
PLANTING A SMALL HOUSE FOUNDATION

A Most Important Influence, For Good or For Bad

By FRANCIS ASBURY ROBINSON
Member American Society of Landscape Architects

Good corner and entrance planting. The fine low shrubs between corners soften the juncture of house and lawn, and yet do not completely hide the foundations.

Good entrance planting of symmetrical plants, fairly high, and vertical in outline.



Good planting about the entrance and corners of a foundation, with the remaining portions left unplanted.

THERE is probably no detail about the ground plan of a property that immediately gives finish and setting to a newly built house more than the foundation planting. Yet how frequently is this detail left to incompetent hands.

The great desire seems to be to immediately encircle the entire foundation with a band of shrubs in an effort to hide every bit of masonry that supports the structure, possibly on the basis that all foundations are ugly.

The resulting effect after several years is that of the house vainly struggling to get out of the woods, to rise above the underbrush that chokes it, no matter how skillfully this "underbrush" has been selected for its flower, foliage or fruit effect.

The other extreme, not so frequently seen, is the house with a beautiful and expensive cut stone foundation carefully preserved to view by omitting all planting of any kind whatsoever. In this case the owner must feel that such a display of expensive stone work adds to the grandeur and dignity of the dwelling.

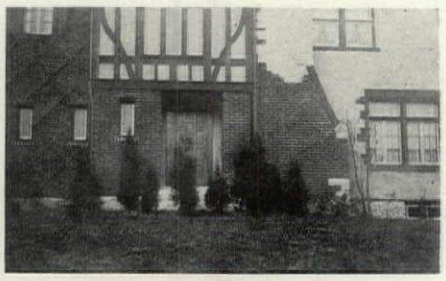
Of course, you have guessed before this, that the best solution is a happy mean between these two extremes. The entrances need attention by a planting that shall mark their position in the scheme. Most frequently, symmetrical plants fairly high and, if possible, vertical in general outline will serve to emphasize and bring out the verticality of the doorway.

In so many cases pointed evergreens suit this purpose admirably, but those of

(Continued on Page 31)

The scattered planting has a disquieting effect, and detracts from the dignity of the house.

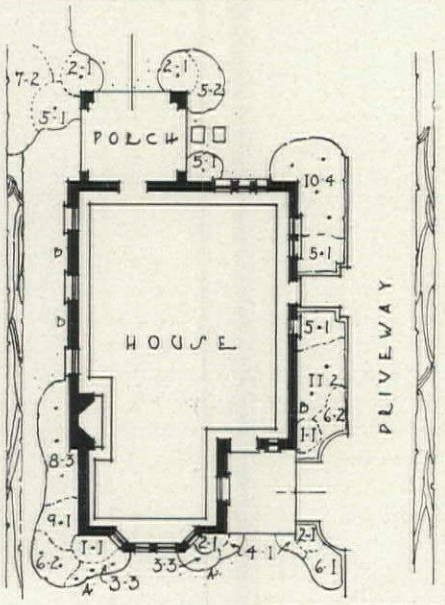
Here the planting is spotty, giving an appearance of confusion and disorder.



Again the planting is spotty, and what could be more illogical than placing plants before an entrance, even though that entrance may never be used!

PLANTING LIST FOR FOUNDATION PLAN AT LEFT

Key	Quantity	Botanical Name—Common Name
		EVERGREENS
1	2	*Juniperus virginiana—Var. Silver Redcedar*
2	4	*Pinus montana mughus—Mugho Pine*
3	6	*Taxus cuspidata—Japanese Yew*
4	1	*Taxus canadensis—Canada Yew*
		DECIDUOUS SHRUBS
5	6	*Berberis thunbergi—Japanese Barberry*
6	5	*Deutzia—Var. Lemoine Deutzia*
7	2	*Forsythia—Var. Primrose Forsythia*
8	3	*Lonicera—Var. White Belle Honeysuckle*
9	1	*Philadelphus—Var. Lemoine Mockorange*
10	4	*Rhodotypos kerrioides—Jetbead*
11	2	*Spiraea—Var. Vanhoutte Spirea*
		VINES
A		*Hedera—Bunchleaf English Ivy*
B		*Ampelopsis engelmanni—Engelmann Creeper*



A BASEMENT TO BE LIVED IN

A Damp, Musty Basement Is No Longer A Necessary Evil

THERE is a proverb to the effect that "out of sight is out of mind," which unfortunately is often applied to the building of a home. The foundation being out of sight is sometimes looked upon as one place where costs may be cut, even if construction must be sacrificed a trifle.

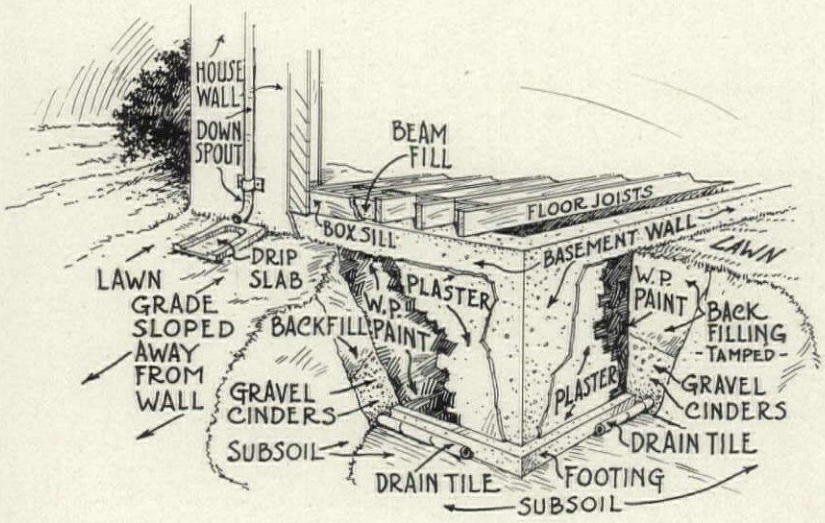
But this inconspicuous part of the house—the foundation—is none the less a vital part, and it deserves the most thorough care in its planning and construction. It is not uncommon to find basements occupied by families, especially the so-called "English basements." In the basements of many residences may be found billiard rooms, workshops, laundries, garages, summer kitchens, and other conveniences, which call for more space and a livable atmosphere.

A dry basement is desirable—in fact a necessity—not only because of these increasing household uses, but as a preventative of rust, mold, and rot, which attack any furnishings and articles stored in a moist atmosphere. Dampness has too often been accepted as a necessary evil. That it is not at all necessary, however, is proved by the numerous dry basements now in use even in unfavorable locations.

Since the basement wall also forms the foundation for the house, it must be sufficiently rigid to prevent settlement and unsightly cracks. It must also withstand the pressure of earth against the outside, must be thoroughly watertight, and of course must be of lasting materials.

Perhaps at this point it would be well to explain something about the general construction of a basement wall in order to understand better the various waterproofing measures that can be taken. Everybody knows that below the basement wall is a footing. The footings of a new building are practically always of monolithic concrete — that is, concrete which is placed in a form or mold and which afterward hardens and forms a solid mass or single stone. For footing work for small houses the mold consists simply of a trench cut in the earth, about twenty inches wide and one foot deep. Concrete being plastic when made and placed, brings an even pressure to bear on all of the inequalities of the ground surface in this trench. Footings for interior posts supporting the floor beams should be of ample size to prevent settlement, which results in plaster cracks and in the saucer effect sometimes found in the floors of old houses.

After the footings are in place, the remainder of the foundation and basement wall may be of a number of materials—monolithic concrete, hollow concrete masonry, such as concrete block, or building tile, or brick, depending on the local situation and the preference of the owner. Concrete block walls are usually less expensive than monolithic concrete walls. Where factory made concrete blocks, tile or brick are available, and where the ground water conditions are not too severe, these forms of materials may be used advantageously.



First build a tight wall. Then cover the outside with plaster and apply waterproofing paint. If there is a drain tile at the base of the footings, your walls should be absolutely dry.

And now assuming that your wall is all built, what can be done to waterproof it? Sometimes the actual waterproofing of the walls can be avoided, or at least simplified by providing proper drainage outside the wall. If the subsoil does not have good drainage, a line of drain tile placed entirely around the outside of the footing and connected to a suitable outlet can generally be relied on to carry off excess water. The excavation above the tile should be filled to a depth of one or two feet with gravel, cinders, or some other material of a porous nature, through which water can seep easily. Back filling may then be completed with earth. If for any reason it is impossible to run a line of tile around the house, it may be placed on the inside of the footing and slightly below it. All down-spouts from roof gutters should be connected to drains or else arranged so as to discharge water onto drip slabs pitched away from the basement wall. Where down-spouts are not used, a concrete gutter should be built against the basement wall at ground level.

As a further means of securing a dry basement, two or more coats of good cement plaster mixed in the proportion of one sack of portland cement to two cubic feet of clean sand, should be applied to the exterior surface of the basement wall just as soon as the mortar joints have hardened. The wall surface should first be thoroughly dampened. A similar coating may be applied on the inside surface if desired.

Another common method of wall treatment is to coat the exterior surface with hot tar, pitch, or suitable asphaltic preparation, using a broom or fibre brush. The wall must be clean and absolutely dry when this coating is applied, or the coating may not adhere perfectly and water may seep through the wall. The cement plaster treatment is generally more satisfactory. In extremely wet soils, builders sometimes use both treatments, applying the asphaltic preparation on the plaster coating after it has hardened and the surface has become dry.

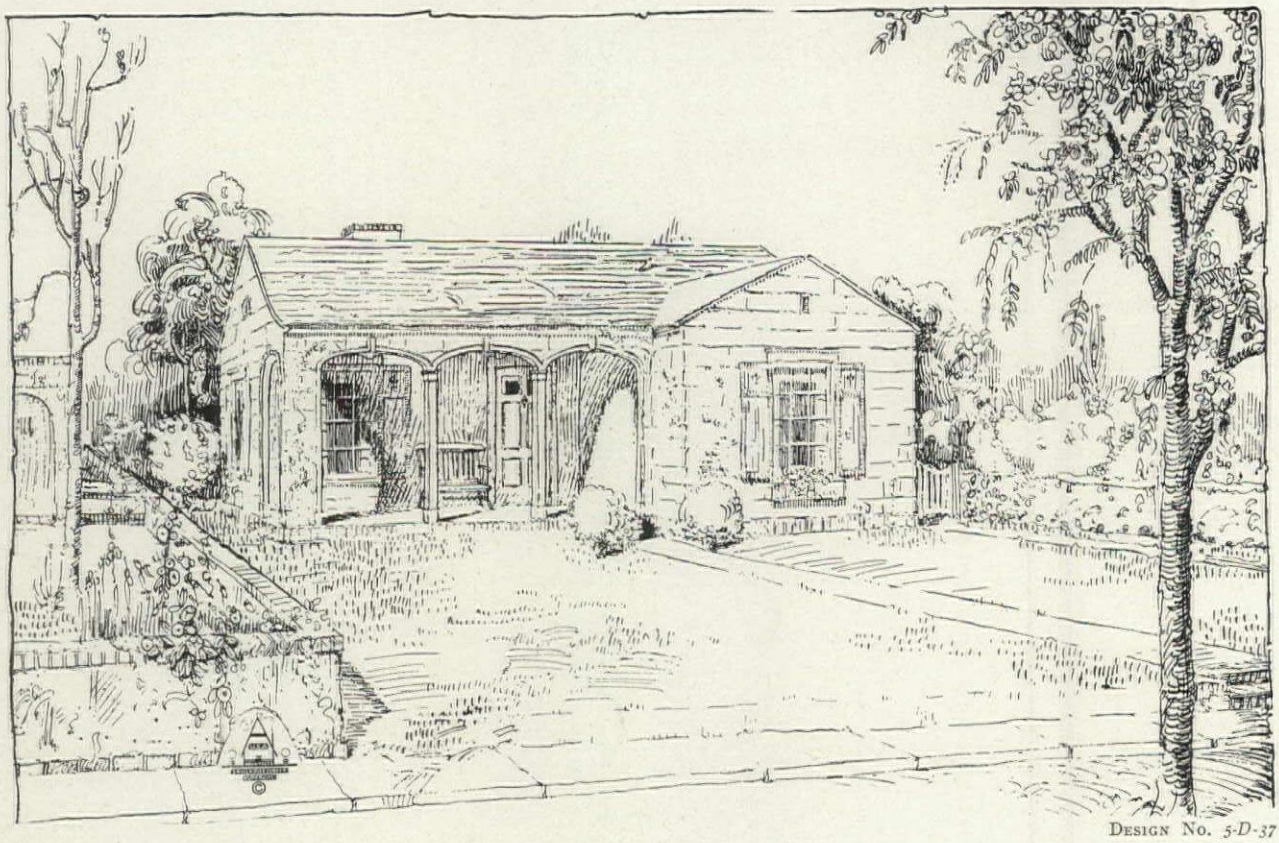
To summarize the important points in keeping the basement dry:

First, avoid water pressure against the outside by suitable drainage.

Then, if monolithic concrete is used make it dense, watertight, using plenty of concrete. If building units are used, take special care in filling and pointing the joints. If these directions are carried out, neither of these types should require special waterproofing under ordinary conditions.

However, in special cases or where construction has not been such as to prevent leakage, waterproof the wall with two coats of cement-sand plaster or with hot tar or pitch. This should preferably be applied to the outside face of the wall.

These are simple precautions, yet their neglect may lead to considerable annoyance. The attention and effort necessary to build a waterproof and dampproof basement is surely worth while.



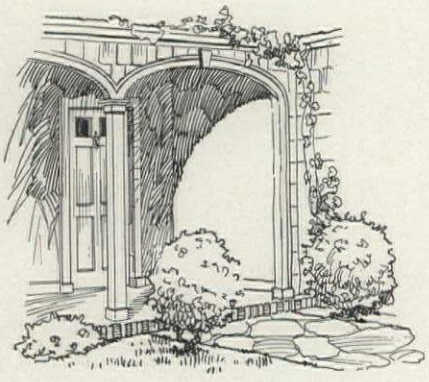
DESIGN NO. 5-D-37

A HOMEY COLONIAL COTTAGE

With An Open Sunny Plan

DO YOU know the difference between a cottage and a bungalow? In America nearly every house of one story is called a bungalow. Perhaps this is because we have associated cottages with the idea of more humble dwellings. However, the term bungalow originated in India as a name given to a shelter built for the protection of traveling Europeans. It was primarily of one story with wide verandas.

Whatever the proper use of these terms may be, to the American the bungalow means a one story house. It means comfort of a practical, definite sort. It is the modern cliff dweller's apartment taken out and given a chance to expand in its own yard. It carries with it all the conveniences of the apartment house plus space and airiness. There are no tiresome stairs to the second story.

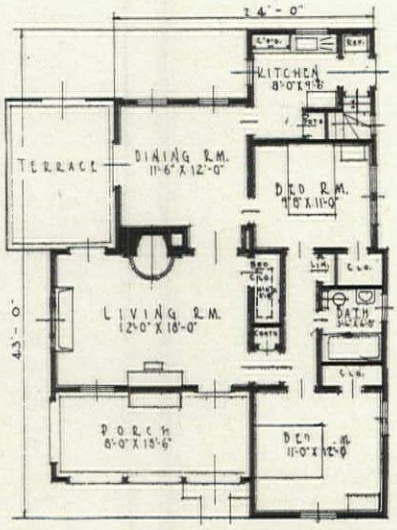


The walls of the porch, if finished with stucco, offer a pleasing contrast to the shingle finish of the outside walls.

But, like many flats and apartments, the bungalow does not always have privacy. The division between living and sleeping quarters is sometimes not distinctly drawn. This little house, 5-D-37, has been scientifically designed to separate these two essential parts of the home. The design has a decidedly interesting Colonial exterior adapted to a very livable type of bungalow plan.

If the original scheme of orientation is followed the living room and dining room will be placed to the south and sunlight will be admitted through east, south and west openings, insuring a bright and cheerful interior. Reversed drawings may be secured for north or west exposures, or to take advantage of peculiarities of the lot.

Introduction of a disappearing type of bed in the living room is a good feature for an occasional emergency. An attractive fireplace is, of course, the center of interest in this room.



The basement extends under only a portion of the house, sufficient, however, to provide for fuel storage, heating space, a small laundry and storage. The basement area may be readily extended if the builder desires more space.

A porch somewhat secluded and protected from the winter winds adds to the coziness of the exterior.

Wide shingles, stained or painted white, are recommended for the exterior. Dull green shutters, a gray green roof and cream or white trim are suggested for a pleasing color scheme. Cream colored stucco with the trowel marks showing is also suggested as an alternate treatment for the front porch walls.

For price of plans and statement of service, turn to page 38.

One purpose ROOMS *make houses too* BIG

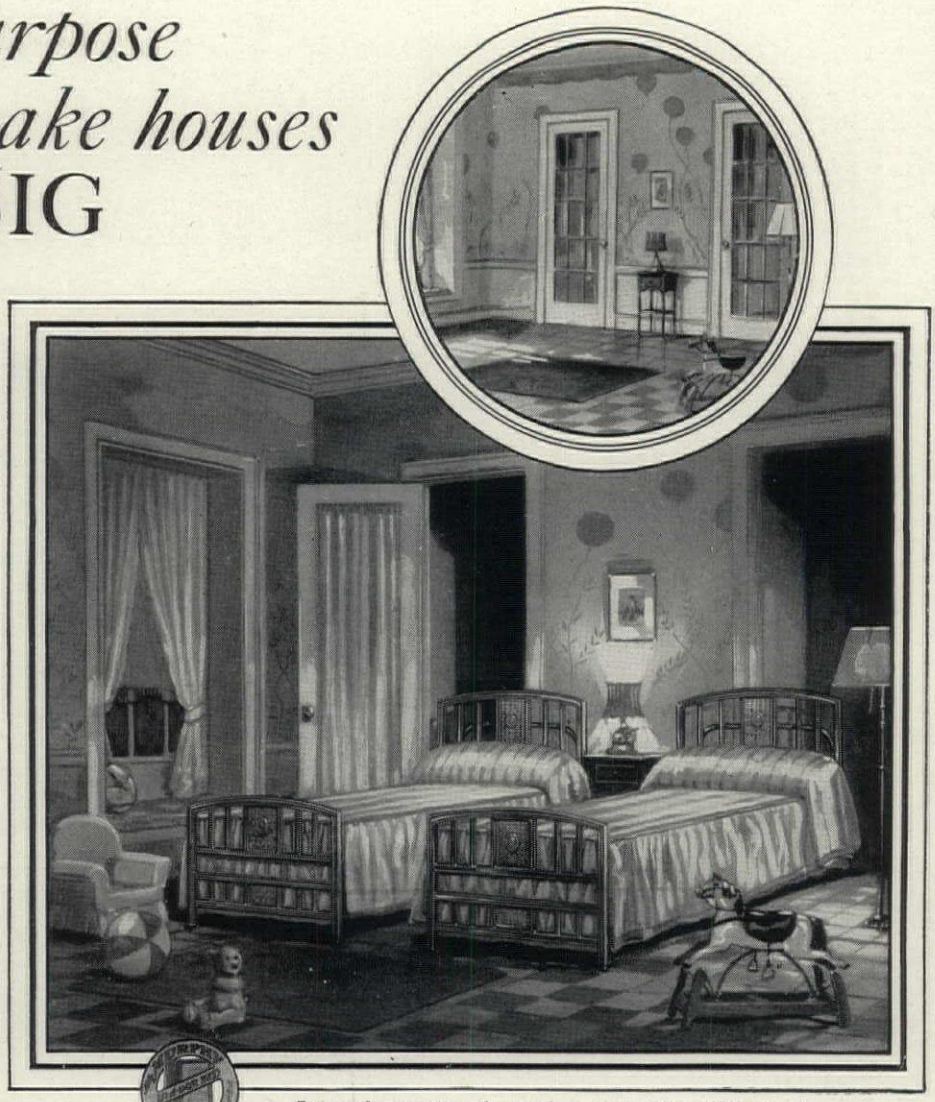
MANY houses built today are too big. They have too many one-purpose rooms and too much space to heat. The owners have too much furniture to buy, too much tax to pay, too much house to keep for the living accommodations provided.

One room equipped with a Murphy In-a-Dor Bed gives the service of two in an old type house. The sleeping porch is an upstairs sun room by day. The den or living room becomes a guest room in reserve. One room serves as a playroom and children's bedroom, leaving the living room free from the toys and noise of romping children.

Behind any standard three-foot door there may be a wonderfully comfortable full size Murphy In-a-Dor Bed, that does not interfere with the constant use of its concealing closet as wardrobe or dressing room.

Surprising, to those not informed, is the harmony between a Murphy In-a-Dor Bed and the other furniture. Authentic styles and beautiful finishes may be selected for any scheme of furnishing, from simple to lavish. Surprising, too, is the ease with which a Murphy In-a-Dor Bed is swung on its pivot and lowered, balanced by special springs, to solid rest upon the floor. Installation, also, is easy. No special construction is needed. Nothing gets out of order.

Murphy In-a-Dor Beds exemplify modern efficiency. They cut the cost of homes — in single or in multiple dwellings — without affecting the living capacity. Follow the trend of home building. Build as though you expect to live in your home forever. Build as though you intend to sell your home tomorrow.



It is only a matter of seconds to change the children's playroom to a restful bedroom

Valuable Book Free

Write for "More Home in Less Space." Full color illustrations show all styles and finishes of Murphy In-a-Dor Beds and pictures them fitted into various rooms of differing decorative schemes.

If you are planning to build or to invest in any type of residential building you should get and read this book. Write for it, today.

MURPHY DOOR BED COMPANY

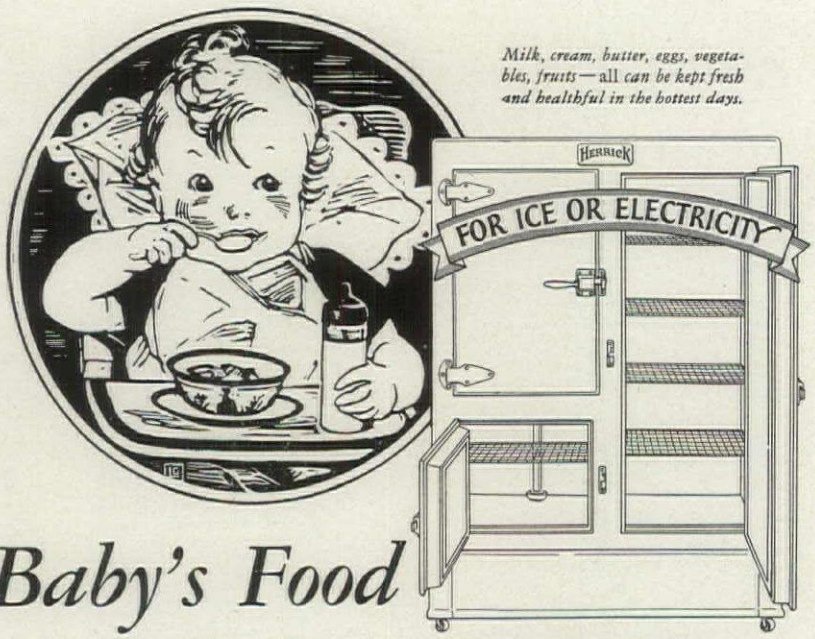
(See addresses below for nearest office)

THE

MURPHY

IN-A-DOR BED

New York City	19 W. 44th St.	St. Petersburg, Fla.	121 Second St., S.	Kansas City, Mo.	1114 Grand Ave.
Chicago, Ill.	22 W. Monroe St.	Miami, Fla.	234 Columbia Bldg.	Dallas, Texas	1919 Pacific Ave.
Atlanta, Ga.	33 Luckie St.	Orlando, Fla.	14 E. Church St.	El Paso, Texas	Neff-Stiles Bldg.
Seattle, Wash.	Terminal Sales Bldg	St. Louis, Mo.	315 N. 10th St.	Houston, Texas	2301 Main St.
San Francisco, Calif.	Crocker Bldg.	Detroit, Mich.	7th Fl., Kresge Bldg	New Orleans, La.	319 Dryades St.
Los Angeles, Calif.	1807 S. Main St.	Birmingham, Ala.	513 N. 21st St.	Montreal	698 St. Catherine St., West
Denver, Colo.	1534 Blake St.	Cleveland, Ohio.	1140-42 Hanna Bldg.	Toronto	21 King Street, East



Milk, cream, butter, eggs, vegetables, fruits—all can be kept fresh and healthful in the hottest days.

Baby's Food

needs the extra protection that HERRICK Triplex Insulation gives

BABY'S delicate foods require an especially good refrigerator to keep them healthful and appetizing. That is why more mothers are daily turning to the HERRICK. Its Triplex Insulation, combined with interior air circulation, offers the best known protection against food spoilage.

What is Triplex Insulation?

It is triple protection against warm air. Outside, the HERRICK is solid oak—a non-conductor of heat. Inside, the linings of spruce, opal glass, or porcelain with spruce foundation are also non-conductors of heat. In between, the walls are packed extra thick with MINERAL WOOL, rated by U. S. tests as one of the world's best insulating materials.

HERRICK Triplex Insulation gives extra efficiency to every pound of ice or watt of electricity. In addition, HERRICK interior air circulation condenses and eliminates moisture and food odors, providing constantly cleansed pure air that gives you the most sanitary and healthful refrigerator money can buy.

Free Recipes and Booklet

Write for "Herrick Refrigerator Recipes," a booklet that tells how to make delicious chilled dishes. Also booklet describing HERRICK models for ice or electricity, Outside Icing models and Water Cooler models. Address The HERRICK Refrigerator Co., 1102 River Street, Waterloo, Iowa.

FREE BLUEPRINTS—Outside icing makes botherless icing in summer and iceless refrigeration in cool weather. Ice delivered through door in back or side of HERRICK. Send for complete set of blueprints.

HERRICK

THE ARISTOCRAT OF REFRIGERATORS

BEFORE YOU BUILD READ THESE BOOKS

Published by the Advertisers in the Small Home
Sent Free Unless Price Quoted

Brick

"Brick—How to Build and Estimate," 25c; "Homes of Lasting Charm" (120 plans), 25c; "Skintled Brickwork," 15c; "Farm Homes of Brick," 5c; "Farm Buildings of Brick," 5c; "Multiple Dwellings of Brick," 10c; "Brick Silos," 10c; "Storage Structures of Reinforced Brickwork," 5c; "The Heart of the Home" (Fireplaces and how to build them), 25c; "What's in the Walls," FREE; "Why Should a Builder Build Brick Homes," FREE; BUILDING ECONOMY (Monthly magazine), 10c a copy, $1.00 a year. The Common Brick Manufacturers' Association, 2180 Guarantee Title Bldg., Cleveland, Ohio.

"Beauty in Brick," illustrating photographs of fifty model homes and several types of garages, designed by leading architects. Sent upon receipt of fifty cents. The Finzer Bros. Clay Co., Sugarcreek, Ohio.

Building Tile

Circulars on Denison Matt Faced Tile Construction. Mason City Brick & Tile Company, 314 Denison Building, Mason City, Ia.

"Tex-Tile Home Plans," National Fire Proofing Company, 302 Fulton Bldg., Pittsburgh.

Closet and Wall Beds

Circulars and information will be sent by the Murphy Door Bed Company, 22 West Monroe Street, Chicago.

Flooring

Beautiful Brochure, The Birch Manufacturers, 227 F. R. A. Building, Oshkosh, Wisconsin.

"Just Inside Your Threshold," suggests ways to individualize your floors. E. L. Bruce Co., Memphis, Tenn.

Illustrated booklet "The New Color Enchantment in Hard Maple Floors." Maple Flooring Manufacturers Association, 1772 McCormick Bldg., Chicago, Ill.

"The Story of Oak Floors," "How and Where to Use Oak Floors," Oak Flooring Bureau, 1273 Builders' Building, Chicago.

Furniture

Literature from the West Michigan Furniture Company, Holland, Michigan.

Hardware

Circulars and information will be sent by Russell & Erwin Manufacturing Co., New Britain, Connecticut.

Heating

Booklet describing six sizes of pipe furnace adapted to houses of all sizes by the Hess Warming and Ventilating Company, 1205 South Western Ave., Chicago, Ill. Heating plans and estimates furnished free upon submission of sketch of house.

"Health and Comfort with Warm Air," a new booklet on home heating, National Warm Air Heating and Ventilating Association, 78 E. Long St., Columbus, Ohio.

Booklet that will help you to decide the kind of a heating plant for your home. H. A. Thrush & Co., Dept. D., Peru, Indiana.

Incinerators

"The Sanitary Elimination of Garbage and Household Waste." Kerner Incinerator Company, 641 East Water St., Milwaukee, Wis.

Insulation

"Build Warm Houses," Samuel Cabot, Inc., 141 Milk Street, Boston, Mass. Samples of Cabot's Heat-Insulating Quilt will also be sent on request.

"House Comfort That Pays for Itself." Wood Conversion Company, Cloquet, Minn.

Samples of Beaver Insulating Board and literature, The Beaver Products Company, Inc., Buffalo, N. Y.

Joist Bridging

Complete literature on Duplex Steel Bridging to take the place of wood bridging. Genfire Steel Company, Youngstown, Ohio.

Landscaping

Beautiful booklet illustrating flowering plants for flower beds or gardens on request. The Triangle Farms, Circleville, Ohio.

Lumber

"California Redwood, Its Uses, Appearance, Characteristics and Physical and Mechanical Properties in Comparison with Other Woods"; "Redwood Home Plans by California Architects"; "Redwood Mountain Cabins and Week End Cottages"; "Redwood for Better Farm Structures." California Redwood Association, Dept. 404, 24 California St., San Francisco, Calif.

"Durable Douglas Fir, America's Permanent Lumber Supply"; "West Coast Hemlock, Its Qualities and Uses"; "Sitka Spruce, a Quality Wood of High Service"; "Western Red Cedar, the Enduring Wood of the Ages"; "Forever, Homes from Forests"; "The Short Length House of West Coast Woods." West Coast Lumber Bureau, 562 MM Stuart Bldg., Seattle, Wash.

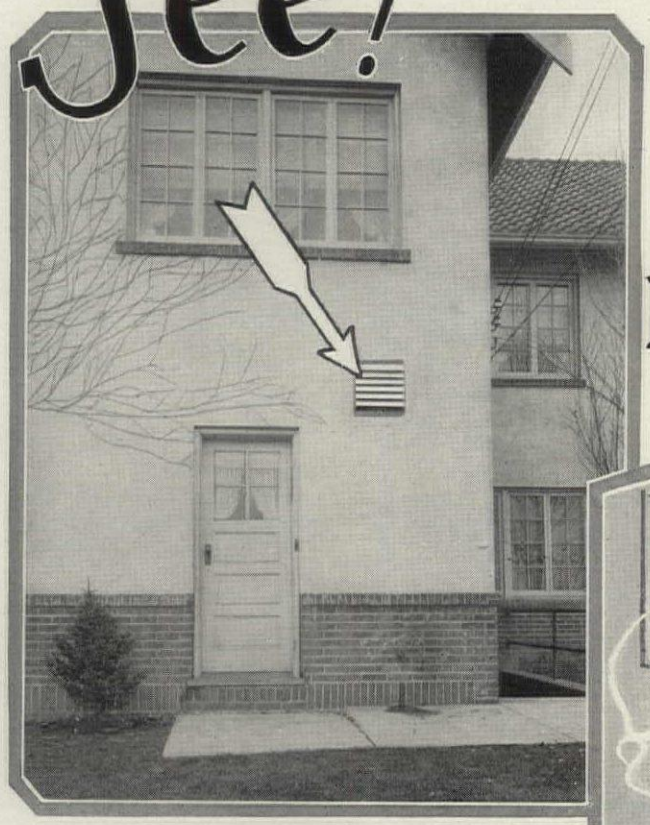
Metal Lath For Plaster or Stucco

Complete literature on metal lath. Genfire Steel Company, Youngstown, Ohio.

"Modern Modes in Better Plastering"; "The Milcor Manual," a technical data book; "Milcor Safe Roofs"; "Milcor Stove Pipe and Fittings, Furnace Pipe and Elbows, Catalog No. 25"; "Milcor Metal Ceilings and Sidewalls, Catalog No. 35," Milwaukee Corrugating Co., Milwaukee, Wis.

(Continued on page 24)

See! how cooking odors and greasy fumes are removed with an ILGAIR Electric Ventilator



IN the home where there's an ILGAIR Electric Ventilator not a suggestion of cookery passes the kitchen door. All objectionable odors, greasy fumes and excessive heat are whisked away before they have a chance to trail thru the house.

You can't imagine the joys of working in a kitchen that's ventilated with one of these compact, quiet-running ILGAIR exhaust fans. It makes the air pure, fresh and invigorating — adds to the comforts of every room in the house and there's less work for the housewife because walls, ceilings, furniture and hangings stay clean much longer.

Let's tell you about the new and improved built-in ILGAIR Kitchen Ventilator. It's sold complete — cabinet, exhaust fan, automatic shutter and all necessary hardware. And is quick and easy to install.

Write for illustrated literature. Clip, sign and mail the coupon.

MR. BUILDER:

The day is here when no home or apartment is truly modern without an ILGAIR Electric Ventilator.

Practically every architect you talk to is for it--almost every modern building plan published specifies it, and good housekeeping authorities everywhere recommend it.

Nowadays it's the home where there's an ILGAIR Ventilator installed in the kitchen which sells or rents at the top price.

Install an ILGAIR Electric Ventilator in the next home you build--make it a sales and rental feature. Write for price and data sheets and 48 page illustrated booklet.

Yours very truly,

ILG ELECTRIC VENTILATING CO.

P S. The ILGAIR is the only electric ventilator made with a fully enclosed self-cooled motor--guaranteed as a complete unit.

Make the kitchen a joy spot

HIGH EFFICIENCY TRADE ILG MARK VENTILATING MACHINE

Ventilation

for Offices, Stores, Restaurants, Factories, Public Buildings, Homes, Theatres, etc.

COUPON

Without obligation please send me a copy of your 48 page illustrated booklet. I am particularly interested in the subjects checked.

Name _____

Full Address _____

_____

☐ Home ☐ Public Building ☐ Office ☐ Store ☐ Factory

ILG ELECTRIC VENTILATING CO.
2860 North Crawford Avenue Chicago, Ill.

8 small homes designed by foremost Architects

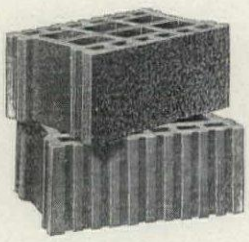
THE Small House Bureau of the American Institute of Architects has designed eight small homes—roomy, comfortable, attractive. Designed them with the same care and skill and patience that they would give to an expensive residence.

The homes are illustrated and floor plans shown, in a booklet, which will be gladly sent you on request, and without charge. You may find in it the very home you want. The plans for any home you choose may be obtained at a reasonable price.

By building with Natco Tex-Tile, from the Tex-Tile Small Home Plans, you can have at a moderate cost a home that will be, from the standpoint of attractiveness, comfort, and permanence, the equal of the best.

NATCO
THE COMPLETE LINE of HOLLOW BUILDING TILE

It takes only a two-cent stamp, and a minute's time, to investigate. Clip and mail the coupon, and see for yourself.



NATCO TEX-TILE

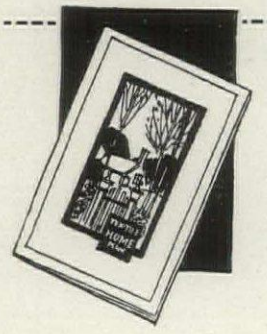
Natco Tex-Tile, with its rich range of beautiful colors, is an ideal building material for the small home. Its texture face has all the charm and distinction of the finest face brick. The units are 8 x 5 x 12 inches, and lay up a self-insulated wall that is moisture proof, bars heat and cold, requires no furring, painting, varnish, or maintenance, is permanently beautiful and permanently satisfactory.

NATIONAL·FIRE·PROOFING·COMPANY

General Offices: **Fulton Building, Pittsburgh, Pa.**

Branch Offices: New York, Flatiron Bldg: Chicago, Builders' Bldg. Philadelphia, Land Title Bldg: Boston, Textile Bldg.
In Canada: National Fire Proofing Co. of Canada, Ltd., Toronto, Ontario.

The Only Concern in the World Making a Complete Line of Structural Clay Products



Clip and Send Coupon

National Fire Proofing Company,
302 Fulton Building, Pittsburgh, Pa.

Send me the free booklet, "Tex-Tile Home Plans."

Name _____

Street _____

City _____ *State* _____

S. H. FEB. '28.

BEFORE YOU BUILD READ THESE BOOKS

Published by the Advertisers in the Small Home
Sent Free Unless Price Quoted

(Continued from page 22)

Paints and Stains

Cabot's Stained Shingles and Creosote Shingle Stains. Booklets will be sent by Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

Refrigeration

"Herrick Refrigerator Recipes," and also a booklet describing Herrick models for ice or electric refrigerators, outside icing models, and water cooler models. The Herrick Refrigerator Co., 1102 River Street, Waterloo, Iowa.

Sewage Disposal

"How to be Safe Without Sewers," also free plan sheets for septic tanks will be sent by Chemical Toilet Corporation, 859 E. Brighton Ave., Syracuse, New York.

Shingles—Composition

Winthrop Tapered Asphalt Shingles. Write for Bulletin A-6, Beckman-Dawson Roofing Company, 223 West Jackson Boulevard, Chicago.

Shingles—Wood for Walls and Roofs

Cabot's Stained Shingles and Creosote Shingle Stains. Booklets will be sent by Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

"Making Old Houses into Charming Homes"; Weatherbest Color Chart; Portfolio of Color Photogravures; "The Construction of Weatherbest Thatched Roofs"; Weatherbest Stained Shingle Co., Inc., 415 Island Street, North Tonawanda, New York.

Ventilation

Forty-eight page booklet describing the new and improved built-in Ilgair Kitchen Ventilator with cabinet, exhaust fan, automatic shutter, and all necessary hardware. Ilg Electric Ventilating Co., 2860 North Crawford Ave., Chicago, Ill.

Waterproofing

Complete literature on waterproofing foundations and basement walls, Genfire Steel Company, Youngstown, Ohio.

Weather Strips

Literature and information will be sent by Chamberlin Metal Weather Strip Company, West Lafayette Blvd., Detroit, Mich. Also a free estimate for weather stripping your home.

Windows—Frame

"What About Your Window Frames?" complete catalogue of frame details and specifications, and "Casement Window Frames." Andersen Lumber Co., Dept H-4, Bayport, Minn.

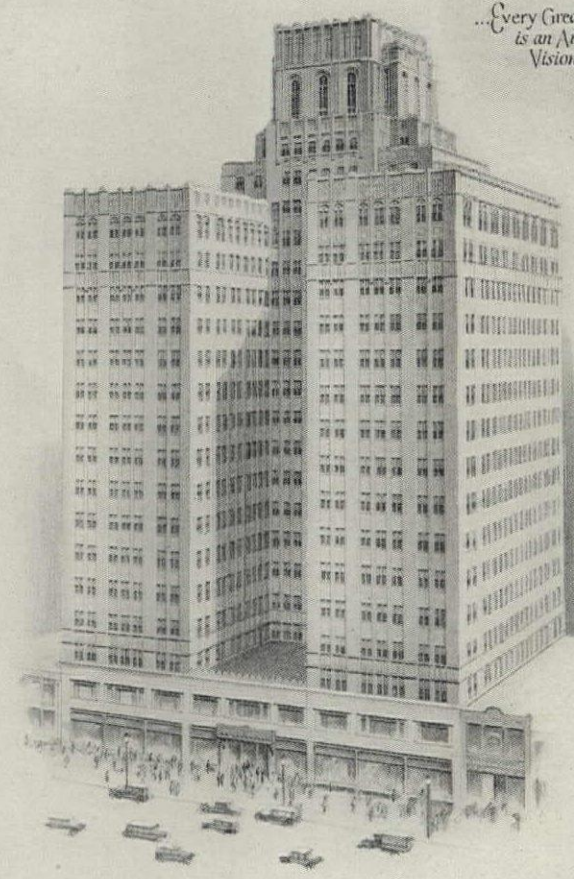
Windows—Steel

Complete literature on steel casement windows; steel lintels for door and window openings and fireplaces; and basement windows, Genfire Steel Company, Youngstown, Ohio.

Woodwork

"Beautiful Birch for Beautiful Woodwork." The Birch Manufacturers, 227 F. R. A. Building, Oshkosh, Wisconsin.

Literature on interior and exterior woodwork by The Curtis Companies Service Bureau, 635 Curtis Bldg., Clinton, Iowa.



...Every Great Building is an Architect's Vision Realized...

The Milam Building —*first* of its kind in the world

THE MILAM BUILDING, SAN ANTONIO, TEXAS

Owners—Travis Investment Company
Harry H. Rogers, Pres. Russell C. Hill, Vice-Pres.
San Antonio, Texas

Architect—George Willis, San Antonio, Texas

General Contractors—L. T. Wright & Co.
San Antonio, Texas

Russwin Dealer—Builders Supply Co.
San Antonio, Texas

—to be *entirely* equipped with an air conditioning plant to supply tenants with washed refrigerated air in summer and warmed air in winter. So they may keep windows closed all the year, and be comfortable, without noise and dust from the street.

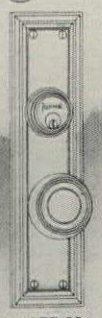
The building is twenty-one stories high. Faced with granite, stone and tapestry brick. Polished cork tile floors. Elevator doors of hand etched bronze. Elevator cabs paneled in apple green leather and curly walnut. Entrance lobby paneled in curly walnut and on its floor a richly colored rug.

This is one of the most beautifully appointed office buildings in the country and is equipped throughout with Russwin Hardware. Its owners wrote: "Although Russwin cost more than others which were offered, we decided it was worth the difference."

for the Bungalow -- the Pretentious Home -- the Monumental Structure

Since 1839

DOOR HANDLE

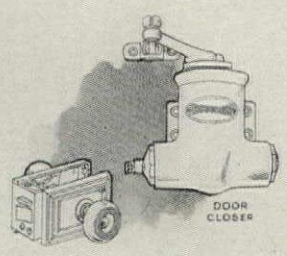


MORTISE CYLINDER LOCK

RUSSWIN

RUSSELL & ERWIN

DISTINCTIVE HARDWARE



UNIT LOCK

DOOR CLOSER

"To Russwin-ize is to Economize—the Economy of the 'Best'"

RUSSELL & ERWIN MANUFACTURING CO., NEW BRITAIN, CONN.
The American Hardware Corporation, Successor

NEW YORK CHICAGO LONDON

Kernerator-equipped residence of Mr. Frank Holton, Pres., Frank Holton & Co., Band Instrument Mfgrs., Elkhorn, Wis., Edmund D. Funston Co., Architects, Racine, Wis.

No Garbage Man Calls on Frank Holton

— because there's no garbage to collect. And what's more, *there never will be,* for the Kernerator destroys it all without odor and with no more work than the weekly lighting of a match to the air dried accumulation in the Kernerator basement combustion chamber.

Think what the Kernerator can mean to you, too—no garbage cans to buy, to clean, to walk to in all kinds of weather. No trash pile in basement—the cause of 3 out of 4 residence fires. No garbage wagon on your driveway or stray scraps littered over the lawn.

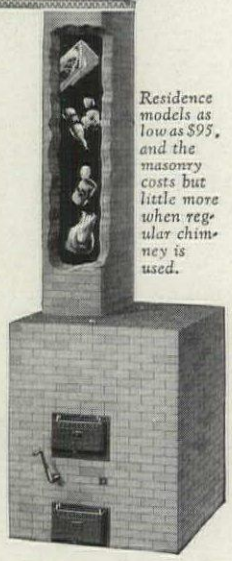
Simply drop all garbage, sweepings, tin cans, papers, boxes, magazines, and broken glassware through the handy hopper door in or near the kitchen. Non-combustibles are flame sterilized for removal with the ashes. No upkeep cost—no gas, coal or other fuel needed. Selected for Home Owners Institute Model Homes in 30 principal cities.

Write for free booklet "The Sanitary Elimination of Garbage and Household Waste."

KERNER INCINERATOR CO.
720 East Water St., (Offices in 89 cities) Milwaukee, Wis.

KERNERATOR
REG. U.S. PAT. OFF.
THE CHIMNEY-FED INCINERATOR

Garbage and Waste Disposal without Leaving the Kitchen



Residence models as low as $95, and the masonry costs but little more when regular chimney is used.

WHAT ELSE DO YOU GET WITH YOUR LOT?

(Continued from Page 14)

rights of way, or walk long distances in the four time trip to and from school each day, you may wonder if these disadvantages are not enough to overcome the many advantages the property might have.

In closely built districts playgrounds for the children count heavily. If your children must go long distances to find open areas—a space to run, coast, or skate—you may conclude, for the sake of your own peace of mind, and the greater opportunities for health and exercise for your children, to consider other property.

How about the planting around the property? Certainly trees are worth something and they may be worth a great deal.

You cash in to a certain extent on your neighbor's trees. If the district is bare and treeless, your first picture of the low familiar rambling building close to the ground, with a sense of permanency among the trees, will have to receive some sort of adjustment. Other factors about lots may be more important than trees, shrubs, and fine springy turf, but the item should be given some thought.

A more mechanical feature is the facing of the lot. Here we can be more specific for the sun has a cheerfully exact way of describing a fairly uniform succession across the heavens, and in most places in this country there are prevailing winds which, though not as stable as Old Sol, may still be reasonably depended upon. How does this affect your house? Well, this is part of the setting. You want sunlight in the principal rooms.

We become more positive about this as we learn of the curative value of sunlight. If the dining room can be located where, excepting on bleak winter mornings, the room is bathed in sunshine, certainly that would be a cheering place to begin the day. If the bedrooms can be located so that on hot summer nights there are refreshing breezes, rest and comfort that come only from untroubled sleep bring their benefits. The advantages of much sunlight and airiness are sometimes gained accidentally, but they can be insured if you plan for them. This is only another way of saying that if you have a positive idea of the kind of house you require, then a lot to conform with that kind of house must also be as positive a part of your requirements.

In this connection perhaps we might say something about the lay of the land.

This is not a story about foundations excepting in the most general sense that your lot is a foundation for your home. But perhaps even so it may not be amiss to say that a composite soil made up of tin cans, brush, and ashes is too hazardous to put reliance in as a base for a foundation wall of heavy masonry. A wall built on brush simply will not stay put.

There are involved problems of drainage, filling, leveling, and grading in almost any home site, whether it be hillside, hollow, or level space. This being true it is obvious why our expert real estate man will give these things weight in his determination of values.

The transportation problem—who does not think of that? If your new home is to be in the suburb of a large city, one of your first thoughts may be how you can get in and out. Street cars, steam roads, or elevateds may be the answer to your question. Perhaps you may furnish your own transportation in the form of the family bus. One of the greatest advantages of the development of the automobile is that it has made the outlying country available to people who must otherwise live close in. Even so, there may be many times when you cannot enjoy this advantage if the roads over which you have to drive get themselves transformed into quagmires.

Your transportation problem may be of quite a different nature if you are living in the city and street cars serve you. I presume no one wants a street car line in his back alley. On the other hand, half a mile away is far enough, especially if that half mile lies between you morning and night on your way to and from the downtown office. The real estate agent says, "How can I get from this site to the markets?" He calls the factor nearness of marketing centers. For you it may mean, "How far away is the corner grocery store?" Certainly it must not be too near, for such things, in spite of their convenience, have a way of decreasing the value of the home site.

This may lead you quite naturally to inquire about the probabilities of the neighborhood confectioner or grocery man building his bleak and utilitarian emporium next door, or of a public garage shouldering its bulk against your private domain. Perhaps this may be a little hard on the outlying neighborhood business men. They are not always responsible for the horrible barefaced quality of the buildings in which they do their business. Sometimes these little buildings are

(Continued on page 32)

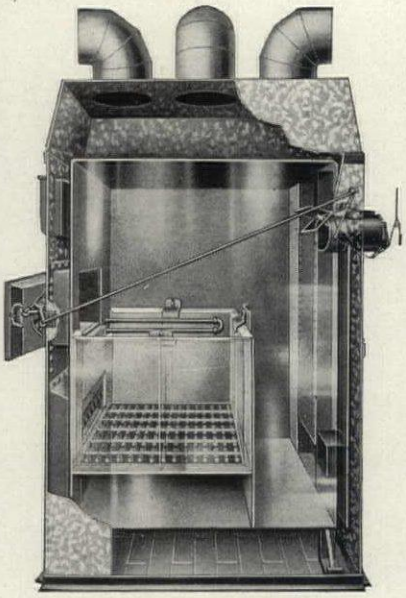
BUY FROM THE MAKER

AND SAVE MONEY.

You can get a HESS WELDED STEEL FURNACE direct from the factory—with complete plans for installing, and have the fine satisfaction and economy we have given thousands of customers in every state in the Union.

Nels Larsen, Richville, Minn.; "The furnace we bought from you 14 years ago has always has been satisfactory. We have never bought any repairs for it. It is a fuel saver."

J. C. Curtis, Canton, N. C.; "In my opinion there is no furnace but the Hess. Have used one for the past seven years. For economy and upkeep in fuel consumption I highly recommend the Hess.



H. E. Lovejoy, Rocky Ford, Colo; We have a good standby in our old furnace put in 1909. Our boy visited us during the Winter and he has a fine modern home and a modern furnace and he remarked "Dad, I don't see how your furnace heats up this big house in half an hour after you strike a match to it. We get no such results from the one in our home."

C. S. Risley, Mt. Dora, Florida, says; Very satisfactory and economical, taking about one-third the wood my fireplace does.

Mrs. Will H. Irwin, Galion, Ohio; "We are delighted with our Hess Pipeless Furnace. It has not cost us a single penny expense since we installed it in 1912."

L. Dunlap, Pendleton, Ore; "Our furnace was installed about 1914 and I never paid 10 cents in repairs. We have had, I think, 21 furnaces from you and never a word of complaint from any. My son now has an order in for two for his own use, expecting them this coming week."

Mrs. H. E. Chase, Milo, Maine; "The furnace has been perfectly satisfactory. No repairs. In constant use for 15 years. It is good shape for another ten years, as far as can be seen.

Ezra White, Roseville, New Mexico; "No trouble, no expense for upkeep. Do not see that a better furnace could be made. Have used mine for 13 years."

Ask for our 48 page booklet which tells you how to get the same heating satisfaction these customers have had.

Send us a sketch of your house and let us tell you how to arrange the work, and what it will cost. No charge—no obligation.

HESS WARMING & VENTILATING COMPANY
1220 South Western Avenue, Chicago, Illinois

BRANCHES AT; DETROIT CINCINNATI MILWAUKEE ST. PAUL

When you build a home beyond the sewer line

and want to increase its value, facilitate the sale and provide a safe comfortable home to live in, there's one sure way to do it. Install sanitary plumbing and let

San-Equip Septic Tanks

solve the sewage disposal problem safely, economically and satisfactorily.

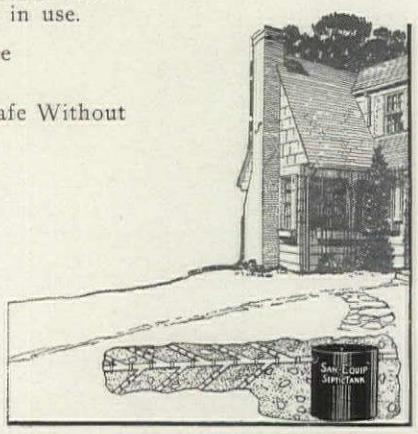
San-Equip Septic Tanks follow U. S. Health Service design. They are rust-proofed copperoid iron—water tight—unbreakable and easily installed at a low cost. Not a failure among the thousands in use.

Write for our Free
PLAN SHEETS
Also Booklets "How to Be Safe Without Sewers."

CHEMICAL TOILET CORPORATION
861 E. Brighton Avenue
SYRACUSE, N. Y.

❖

Makers also of San-Equip Waterless Toilets



THE BUILDING AND LOAN ASSOCIATION

(Continued from Page 13)

or renewing the first.

Instead of this rather clumsy, rather expensive method, the building and loan association offers to lend you the whole $3,200. But if a bank or mortgage company can give you a mortgage only up to 50 per cent of the total value of the property, how is it safe for the association to lend you a higher percentage? Because of the principle of "amortization" or "killing off" the loan by monthly payments. You start to repay your loan at once and that makes the association's risk on your loan grow less every month.

So you apply for a loan of $3,200, giving full information as to how you propose to swing it, and agreeing to pay the current rate of interest—say, 7 per cent. And you agree to subscribe to 32 shares of stock, each share of $100 par value, to be paid for at the rate of $16 a month. You also pay a small fee for investigation of the property and, perhaps, the first month's "dues" or payment on the stock, and interest on the loan.

Your association's officers proceed to investigate every element of the transaction and, if they find everything satisfactory, make the loan. They make out a mortgage (or deed of trust) and a note (or bond) which you must sign. These papers protect both you and the organization.

Now, the interest on your $3,200, at 7 per cent, comes to $18.67 a month. So you agree to pay the association $34.67 a month—this interest on the loan, plus the $16 dues on your 32 shares. Now get this point: your shares begin to earn dividends at once. Your dividends are credited to your account. When your dues, plus the dividends they earn, come to a total of $3,200 your loan is paid off.

So you really are, again, a savings member of the association, as well as a borrower. If your association charges you —and every other borrower—7 per cent interest, its dividends will be about 6 per cent; because if it is well conducted its expenses are small, and because no one profits except the actual share-holding members.

At the end of six months your $16 monthly payments will amount to $96, and the 3 per cent half-yearly dividend, which, according to one method of computation, will amount to $1.20, will be added to it, making $97.20. For the next six months, your payments will earn dividends on $97.20, instead of only $96, and you will find yourself with a credit of $197.31 at the end of the first year.

By this method, at the end of 139 months, the total value of your shares will be $3,218.04—more than the value of your loan. In other words, your shares will have "matured." You will present your stock certificate or your pass-book at the office of the association. It will be cancelled, and you will be given a check for $18.04. Your mortgage will be returned to you and you will have completed title to the property.

Now review what has happened. You borrowed $3,200 and agreed to pay for it at the rate of $16 a month—that is, in 200 months, or 18 years and 8 months. Instead, you find that the debt is discharged at the end of 139 months—11 years and 7 months. This is because you have shared in the profits on the sums you have paid in.

One way of thinking of membership in a building and loan association is that you go into the banking business together with all the other members, in order to make a loan to yourself, and to any of the other members who may want loans for home-building or—buying purposes.

What has it cost you? Is the net cost of borrowing by this plan greater or less than the cost of financing a home by the mortgage or the contract method? In the case we have been following, you will have paid in a total of 139 times $34.67, or $4,819.13 for the use and repaying of a loan of $3,200 for 11 years and 7 months. This figures out 6.47 per cent—and you may be sure that no first or second mortgage lender and no professional builder would be satisfied with that as the total yield of his capital.

So a building and loan association helps the family that wants to acquire its own home in five distinct, though closely related ways. It affords a safe way to invest savings at a relatively high dividend-rate. It makes saving easy by providing for the regular laying-away of small sums. Third, it makes the gruelling task of getting a start easier and sooner done. Fourth, it provides for payment of the cost of the property by monthly payments little or no greater than the rent on an equally good home. And thus it changes the monthly rent from an expense into a permanent investment.

An Important Factor in *Lower Building Costs*

Home of E. H. Baker, Akron, Ohio. Builder, Wise Home Building Co., used WEATHERBEST Gray Sidewalls and Green for the Roof.

WEATHERBEST Stained Shingles cost less than ordinary sidewall material. They save you money not only in labor, painting and repainting, but they give you extra insulation to reduce fuel cost. Their beauty, especially with a WEATHERBEST roof in contrasting color, is also a source of satisfaction. Lasting colors are assured by the WEATHERBEST hand dipped staining process.

Let us send color chart with portfolio of color photogravures showing a wide range of WEATHERBEST Stained Shingles in different combinations for sidewalls and roofs. Send 10c (stamps or coin) with coupon to cover mailing and handling. WEATHERBEST STAINED SHINGLE CO., Inc., 424 Main St., North Tonawanda, N. Y. Western Plant—St. Paul, Minn. Distributing Warehouses in Leading Centers.

Remodel the Old Home with WEATHERBEST

Home of W. Woodhead, Canton, N. Y. given new value and beauty with WEATHERBEST Stained Shingles right over the old siding.

You can lay WEATHERBEST Stained Shingles right over old sidewalls and old roof to give your old home modern appearance, make it warmer, and save repair and repainting expense. Send kodak picture or photograph of an old house and let our Service Dept. furnish free sketch and suggestions for remodeling and reshingling. No obligation.

Weatherbest STAINED SHINGLES FOR ROOFS AND SIDE-WALLS

WEATHERBEST STAINED SHINGLE CO., Inc.,
424 Main St., North Tonawanda, N. Y.
Gentlemen:
Enclosed is 10c (stamps or coin). Please send WEATHERBEST Color Chart, Portfolio of Photogravures showing WEATHERBEST Homes in color, some with floor plans. Also enclose book on Modernizing and Reshingling old homes.

Name .....

Address .....

Bluefield Blend

is New Winthrop Color

THIS house in Park Ridge, Illinois, was the first one roofed in Bluefield Blend—a new color harmony for Winthrop Tapered Asphalt Shingles.

Blue predominates in this blend of heather blue, heather green and reddish purple. It makes a cool, dignified blend that is suited admirably to brick with buff tones and to stuccos of light colors.

Bluefield Blend comes ready to lay right from the bundles. It is the fifteenth Winthrop color—all permanent, all the colors of natural slate, crushed and embedded in the everlasting asphalt.

With the Winthrop range of colors to select from, you can fit your house—no matter what type—into its surroundings. You can have solid colors, blends, patterns or mottled effects. There's a variety of styles, too, for the laying of these exclusive shingles.

Winthrops are the only tapered asphalt shingles. Their thick butts cast attractive shadow lines, lie flat and close, and double the wearing thickness. Winthrops are fire resisting—bear the Class C Label of Underwriters' Laboratories.

SAMPLE FREE

Let us send you a sample of Bluefield Blend and literature, illustrated in color, on the other Winthrop colors. Write today. Ask for Bulletin A-19 and for samples—if you wish to see Bluefield Blend.

BECKMAN-DAWSON
Roofing Company
223 West Jackson Boulevard
CHICAGO, ILLINOIS
Factories at Chicago, Detroit and Lockport, N. Y.

the Big Butt Shingle
Winthrop
Tapered Asphalt Shingles

WHEN A DINING ROOM IS NOT NEEDED

(Continued from Page 15)

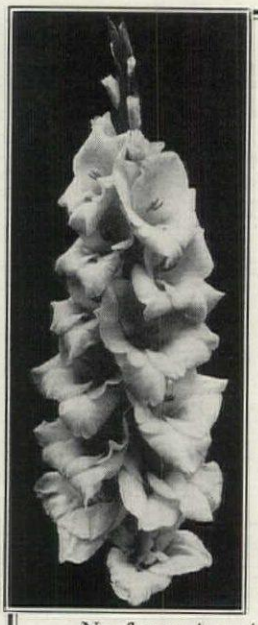
the shutters across the front, and the latticed entrance. The finely divided window panes contribute greatly to the cottage-like effect.

As to the best way to face this home, much, of course, depends upon the local surroundings and the prevailing breezes. But in general perhaps a west facing would be best. In most sections of the country, where the weather is temperate, one likes the south and west breezes and sunlight for the living room. The fernery should also be a sunny place. If the front entrance is toward the west, we have south and west exposure for the living room and south and east for the fernery. The east morning light in the fernery for breakfast would be quite delightful. If, though, the lot faces south or east, it would be well, in most localities, to build the house reversed. Reversed drawings may be secured for this purpose.

Construction: Frame, masonry foundations, wall finish of wide siding or shingles, double hung windows with small panes, shingle roof.

Lot size, approximately forty feet.

For price of plans and description of service, turn to page 38.



WHY NOT PLANT GLADS IN YOUR FIRST YEAR GARDEN?

No flower is easier grown. *Have a Flower Bed in Full Bloom* in from two to three months after planting.

Special Introductory Offer

One each of twenty-five different gladiolus bulbs postpaid for

A DOLLAR!

Every one guaranteed to be a different color. Illustrated catalog free.

THE TRIANGLE FARMS
Circleville, Ohio
Dr. B. R. Bales, Prop.

TWO EXTERIORS FOR A FLEXIBLE PLAN

(Continued from Page 16)

siding, shingles, stucco. The ornamentation is limited to contrasting uses of these inexpensive finishes. Where extra things are added, such as the shutters, trellis work, railing, they are of the simplest design and may be secured from stock.

If means are limited, and one is forced to economize these houses have been designed so that they can be built on a narrow lot, of approximately thirty-five feet in width, placing the narrow end toward the street with the porch at the front. If the lot is a little wider, say thirty-eight or forty feet, the long side may be placed toward the street and the porch at the end omitted. Then if the lot is still wider, the porch may be placed at the end.

The unusual placement of the living room makes this plan suitable for almost any exposure, but if it is desired to build the houses reversed to take advantage of special conditions, such as surrounding views, prevailing winds, and so on, reversed drawings may be secured.

For price of plans and statement of service, turn to page 38.

REMODEL
with Oak Floors

OAK FLOORING solves the problem of the old home made new. No other improvement will do more to make rooms modern. An oak floor brightens the entire interior, and adds to the attractiveness of furniture. It is the correct foundation for rugs.

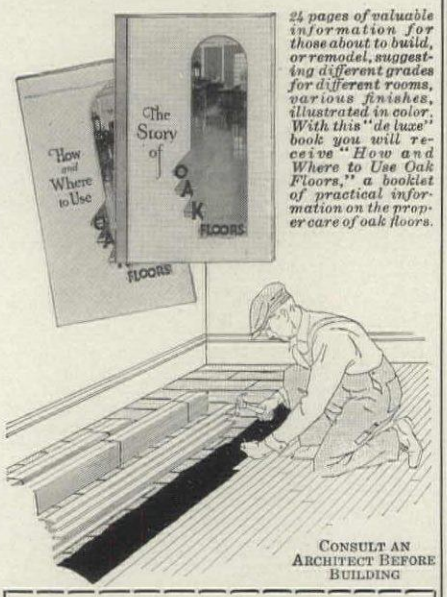
Each room as taste dictates

Your choice of red or white oak, plain or quarter-sawn, in any color finish, will give individuality to different rooms, in complete harmony with any scheme of decoration.

Laid over the old worn floor

The old floor, seasoned by time, holds securely in place your new oak floor, which is side and end matched, providing a continuous polished surface in Nature's beautiful oak. Such a floor is permanent, and adds to rental and resale value. There is a grade of oak flooring to suit every purse, all equally sound and enduring. One room at a time may be re-floored, if desirable, to avoid confusion. No woodwork is disturbed except the quarter-round.

OAK FLOORING BUREAU
1273 Builders' Building CHICAGO



24 pages of valuable information for those about to build, or remodel, suggesting different grades for different rooms, various finishes, illustrated in color. With this "de luxe" book you will receive "How and Where to Use Oak Floors," a booklet of practical information on the proper care of oak floors.

CONSULT AN ARCHITECT BEFORE BUILDING

OAK FLOORING BUREAU, 1273 Builders' Bldg., *Chicago*
Please send me "The Story of Oak Floors," and "How and Where to Use Oak Floors."

Name.....

Address.....

City.....*State*.....

A SMALL HOUSE FOUNDATION

(Continued from Page 18)

close fine-grained texture should be used rather than the open branched varieties.

The latter are generally out of proportion with the fine details of the doorway and eventually make huge trees, entirely out of place so close to the house.

The next important points that need planting are the corners. Here the straight sharp line of the house makes a very harsh note as it rises from the ground to the roof cornice. The softening of this junction with the ground and the reinforcing of this exterior angle by bulky planting seems to "tie" the house to the ground and give it necessary support at an important point in the composition.

Large deciduous shrubs make the best backbone for this planting with lower ones planted in such a way as to carry the foliage line down to the ground. Sometimes, if the planting is large enough, a few coniferous evergreens may be introduced to brace up such a planting with shrubs, either deciduous or evergreens, to face down to the ground.

The remaining portions of the foundation between the entrances and corners should generally be left unplanted unless a service wing needs to be screened from some view from the lawn or garden.

By allowing the foundation to be exposed here and there, we get the impression of solidity and strength, and by contrast covering certain other portions of the foundation, we soften its harsh aspect and make the entire house seem to settle down naturally into its background.

The planting should be, as far as possible, refined in character because of its position near the fine architectural details of the house. Shrubs conspicuous for their flowers should be in the majority and foliage of fine texture will be far more pleasing than coarse.

One of the principal effects of evergreens, beside their formality and dense texture, is the winter aspect. Keeping their rich dark green color in the winter months, they add a warmth which the deciduous plants with their bare branches utterly lack. In the north, the snow caught on their branches makes a picture that no other plant can equal.

In the accompanying planting list (page 18) you will note that evergreens play an important part in the foundation planting of this house.

Strive then to steer a happy course in your foundation schemes between the extreme of barrenness and the extreme of overplanting. In no other way will satisfaction and success result.

Stucco Sticks Tight To Tile

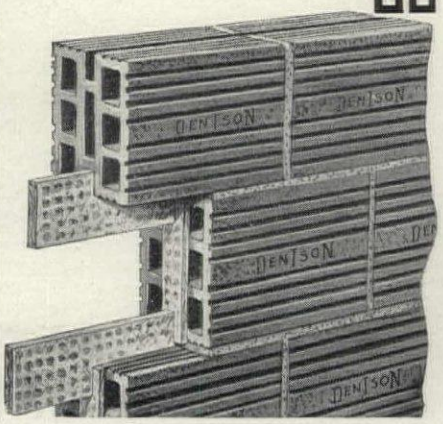
Stucco is applied direct to a tile wall's solid surface. It is there to stay because *it* and the wall expand and contract at practically the same rate under changing temperatures.

You will get a heap of satisfaction from owning a home with walls like that. Its neat newness will be practically "everlasting," yet its first cost will be no more completed than when ordinary materials are used.

Tile walls are a strong attraction for buyers if you ever wish to sell. They increase the re-sale value of a home. They decrease upkeep expense and insurance rates.

May we send you the illustrated circular, "How to Use Denison Load-Bearing Tile"? Many small-home builders have found it valuable as well as helpful. No obligation—just write—

Mason City Brick & Tile Co.
314 Denison Bldg.
Mason City, - Iowa



CABOT'S

TIME TESTED INSULATION

Residence at Tarrytown, N. Y. Insulated with Double-ply Waterproof Quilt. King-Walsh Corporation, New York City, Architects and Builders.

Cabot's Quilt prevents the passage of heat into or out of buildings. It keeps them warmer in winter,—cooler in summer.

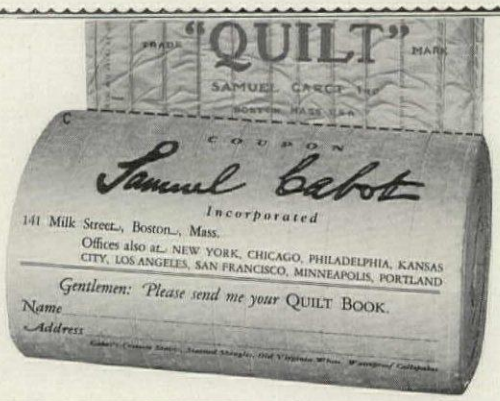
Not only is Cabot's Quilt effective as an insulator and at the most reasonable cost, but it is rot-proof, vermin-proof and permanent. It is flexible and will not crack. It is easily and cheaply applied. It is light in weight and does not require special strengthened construction when it is used.

When a house is built with Cabot's Quilt as an insulator, it makes it so much warmer that a smaller boiler and smaller radiators and piping can be used. **This saves enough money to pay for the cost of all the Quilt and its installation and leaves a profit beside.** Thereafter the Quilt pays dividends from year to year by reducing fuel consumption.

Exactly the same economies apply to any other kind of building often insulated with Cabot's Quilt.

Cabot's Quilt

IN SUCCESSFUL USE FOR OVER THIRTY YEARS



WHAT ELSE DO YOU GET WITH YOUR LOT?

(Continued from Page 26)

quaintly fashioned and thus inviting to everybody.

Intelligent subdividers sometimes put restrictions into the deeds that stand as a permanent protection from the encroachments of the little businesses and manufacturing plants, apartment houses, steam roads, and so on. Our expert realtor looks for these restrictions in the deed. If they are not there he knows that protection is missing. If the man who takes the lot next to the one you are considering may do what he pleases, the realtor will make a definite adjustment for that in the value of the lot.

This has all had to do with environment or setting. The second large factor in the real estate expert's evaluation is, as I have said, trend. Now, determining trend is a matter of judgment. Unfortunately things sometimes happen to neighborhoods and environments which cannot be anticipated But in general our expert knows that if a district is fundamentally well situated every bit of property within that district will tend to increase in value as the district is improved, as buildings are placed on it, sewers built, streets and sidewalks installed, and as trees and foliage develop. Given a certain piece of property to evaluate, he measures the character of the district and whether it will tend to become better or worse. He knows to what extent any undesirable elements are securing possession. He takes into account the kind of people who live there and whether they find it an increasingly pleasant and agreeable place to live. That gives him a basis on which to estimate value.

A gentleman speaking to me the other day about his property gave the trend of his neighborhood a plain but unfancy name because he had taken a chance. He had built his home in a midsection of an unprotected property with a gorgeous setting. His house was set back among the trees, and looking out he had the vista of a great river valley. All would have been lovely if everyone who built along that street had had his vision about it, but they did not. Now he has a factory behind him and a railroad at the side of him and an apartment house on an adjacent lot. The people who built at the side of him did not share his enthusiasm for a large front yard, and since there were no restrictions in the property they built as they pleased. They built far in front of him, and unfortunately put up houses that were much beneath the character of his own. He would gladly sell his home for less than he paid for it.

Needless to say, you must pay more for a property situated in a district where the neighborhood is made than is necessary where much is to be done and where you must necessarily assume some hazard, but if you follow the expert's method you have analyzed closely and have applied common sense to the solution, and you are as safe as anyone can be.

We speak of "history" as being one of the major elements to command your interest in selecting a site. We mean history in a somewhat legal sense, and as it has to do with title, taxes, and assessments that may lie against the property. It is so obvious that you must have a clear title that it hardly seems worth while saying anything about it here, but from the fact that titles are often clouded perhaps we may just offer a word of warning. Do not buy your home site without knowing what you buy is to be entirely your own. There must be no "ifs" or "ands" made by previous owners that will bring you disappointments. These matters involve expert intelligence about deeds, assessments, mortgages, transfers, easements, taxes, payments, quit claims, satisfactions, and so on, all of which are generally beyond the knowledge of the average man. Do not trust yourself to

(Continued on Page 34)

THIS is an age of color. Conventional monotony is being supplanted by new and beautiful exteriors just as the older styles of interior decoration, furniture, and hangings are giving way to the more pleasing modes. Common brick is in harmony with this trend. ¶¶Charming and original exterior effects are easily accomplished and are permanent. ¶¶Brick masonry avoids upkeep expense; it needs no paint or repair. First costs are but little, if any, higher than less durable construction. Any slight increase is a safe and highly profitable investment, for it saves, many times over, the inevitable upkeep expense of most other materials. ¶¶Brick walls reduce fire hazards, afford highest resistance to earthquake, flood and hurricane, and amply protect against extremes of heat and cold. For these reasons, a brick-built home always has high resale value. ¶¶"Homes of Lasting Charm," an interesting book of 120 practical small home designs is unique in that all homes shown have been actually built and lived in by satisfied owners. The home builder can select with assurance that no inconveniences will be discovered after building. It includes suggestions for beautifying garden and grounds. Write for it.

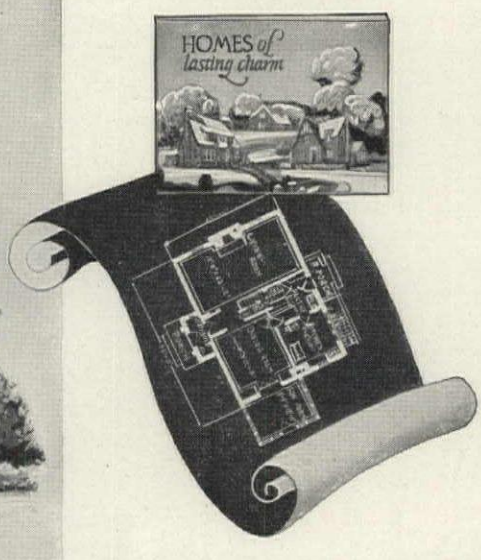
AT YOUR SERVICE

These District Association Offices and Brick Manufacturers Everywhere

Boston.....11 Beacon Street
Chicago.....605 Builders Bldg.
Cleveland—Ohio Association.....2124 Guarantee Title Building
Denver.....1735 Stout St.
Detroit.....400 U. S. Mortgage Trust Bldg.
Hartford.....226 Pearl St.
New York City.....1716 Grand Cen. Term'l
Norfolk.....112 West Plume St.
Philadelphia.....121 N. Broad St.
Pittsburgh....702 First National Bank Bldg.
Raleigh, N. C.....508 Com. Bank Bldg.
Salt Lake City.....301 Atlas Blk.
Seattle, Wash.....913 Arctic Bldg.

The Common Brick Manufacturers Association of America, 2180 Guarantee Title Bldg., Cleveland, Ohio

Are you acquainted with the CHARM OF COMMON BRICK



Brick books for your use

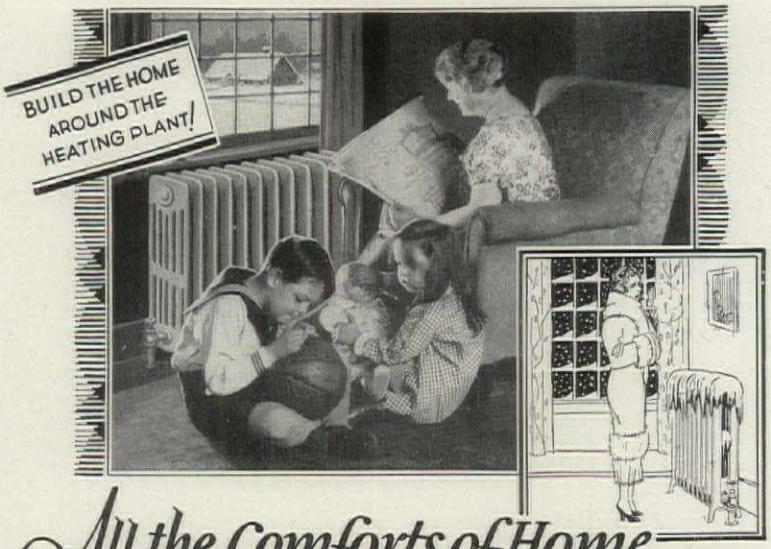
- ☐ Homes of Lasting Charm . 25c
- ☐ Skintled Brickwork 15c
- ☐ Multiple Dwellings of Brick 10c
- ☐ Farm Homes of Brick . . . 5c
- ☐ Brick, How to Build and Estimate 25c
- ☐ The Heart of the Home (Fireplaces) 25c

Name_____

Address_____

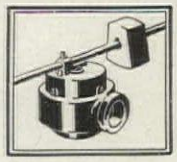
Check above books wanted, or send $1.00 for all of these books.

BRICK *forever*
PREFERRED BY ARCHITECTS



All the Comforts of Home depend on Good Heating!

A BEAUTIFUL HOME cannot bring the utmost in satisfaction to its owners unless properly heated. Even the most modest cottage depends on a good heating plant.


Thrush Regulator

Hot Water Heat, Thrush Equipped, is best for you because it is mild and very healthful. It maintains uniform temperatures without extremes of hot or cold which are harmful.

Hot Water Heat, Thrush Equipped, provides all of the benefits and conveniences anyone could ask for in a heating plant. It automatically controls the fires throughout the day and night and because of the scientific principle involved, it increases heat transmission which means fuel economy. It may be put on old or new plants with a resulting saving of fuel of 20% to 40%.

On a new plant it costs very little because the economy in installation it makes possible greatly offsets the cost of Thrush Equipment. Ask your heating contractor about it today. Insist on a Thrush Equipped Hot Water Heating Plant if you want the best. Buy for the life of your home. The saving of fuel alone will pay for the installation in a few years time.

H. A. THRUSH & Co., Peru, Indiana

for Healthful, Economical Heating

THRUSH SYSTEM OF HOT WATER HEATING

Before you buy or build a home, you should know all about the various methods of heating so that you may be able to select the best. Send for this booklet which tells about all forms of heating and why Thrush System is the best.

SEND FOR THIS BOOK!

H. A. Thrush & Co.
Dept. D. Peru, Indiana _____ *19*___

Please send me your booklet "Which Heating Plant for My Home" to help me decide.

*Name*_____

*Address*_____

WHAT ELSE DO YOU GET WITH YOUR LOT?

(Continued from page 32)

judge about them. There are people who make the grubbing into titles their life's work. Let them do it. It is better to spend the modest fee these people charge than to find, when too late, that your title has some dark spots against it that you cannot efface without heavy costs.

Your investigation is only half done when the "title grubber"—the abstract-man—has done his work. For an abstract is only a collection of facts—the history of a property—and we all know there may be many a foul blot on history. When the abstractor guarantees his search he only certifies that all the items of history are recorded—not that the title is clear. If you make a mistake about this you will find yourself in a numerous company of disappointed investors who found after purchasing property that they had to supply funds to "quiet the title." The seller is responsible for such expense if you hold him for it before the transfer is made. In brief, do two things. Get a bonded abstract—employ a competent title lawyer to make sure that the title is clear.

When you buy, know where your property is in the most exact sense. Have it surveyed. Put no trust in corner posts set by previous owners. They may be right, or they may be wholly wrong.

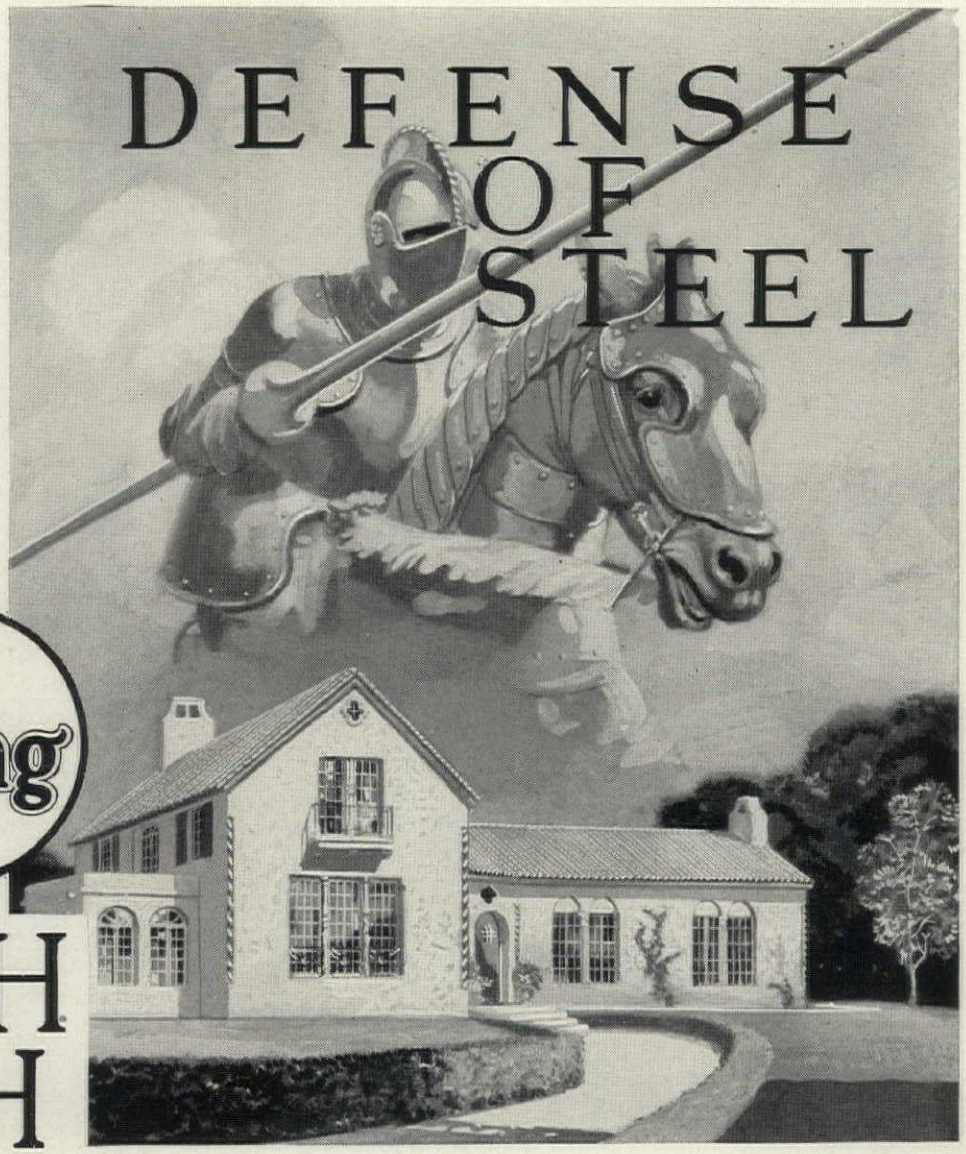
While your surveyor is setting the corner posts have him also locate the level of the sewer so that you will not find to your misfortune that your basement level is too low for drainage.

Up to this point we have not thought of area at all, but there will come a time in your study when you must think of area. It may be that your problem will be the very simple one of selecting a rectangular lot with so many feet of frontage, but it often happens that lots are quite irregular, and irregular lots are frequently difficult to build on. This is especially true if the restrictions in the deed call for the house to be set back a definite distance from the front line, or if there are restrictions in the building code of your city which state a definite clearance between the side walls of your house and the lot line.

When the lot is violently irregular, the kind of house that an architect would design for it must follow an irregular plan and outline with a resulting greater expense in building. The money you may save in buying an irregular piece of property may be over-balanced by the excess money you must spend in working out a specific plan to fit its contours. This does not mean that irregular lots are not to be thought of. On the contrary, many of our most beautiful residential sections are being laid out with the streets following the natural contours of the land, and necessarily must include lots of many shapes.

What is the right price to pay for your lot? That is largely up to you. There is an old and somewhat worn rule that the price of the house should not exceed four times the price of the lot, or be less than three times its price, but it is easily conceivable that one would be justified in paying a thousand dollars extra, more or less, to get a location in a district where all the facilities, environment, and setting are most peculiarly suited to his requirements. The important thing is to know all that you must pay for the land before making the final purchase. If there are sewers, sidewalks, and streets to be put in at a later time, the original purchase price of the property should be properly discounted so that in the end the whole cost of the site will not mount up disproportionately to the cost of your house. If your funds are definitely limited, remember that the extra money you put into a lot cannot go into your house.

Buy environment, setting, transportation, marketing facilities, improvements, appreciating values, and a good title. And get an architect when you build. You pay for him anyway, whether you get him or not.



Wheeling
CORRUGATING COMPANY

ARCH LATH

TODAY—just as in the long ago—the best defense for man or property is *steel!* Wheeling Arch Lath makes the walls of your home fire-safe. For the protection of your family, take the precaution to specify these Wheeling "armored walls."

Arch Lath is made from a solid sheet of steel and in the making *all* the steel is used. This insures added rigidity, easier handling and a more substantial base for plaster, while saving also in the amount of plaster required. The work can be done faster, because the second coat can be applied almost immediately; about one-half the amount of plaster is used and it spreads smoothly and evenly.

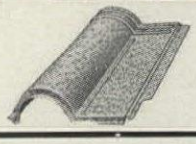
One Sheet of Arch Lath (27x96) grips the plaster at 8064 points; making the wall an integral unit of rigidity and strength, while minimizing possibility of cracking.

Wheeling Arch Lath is so designed that it grips the plaster at many angles. The perfect "keying" of Arch Lath—its rigidity and uniformity of results—practically eliminates the unsightly, costly nuisance of cracking.

Arch Lath gives to any home, large or small, the protection and beauty of fire-proof, smooth, unbroken walls; its final economy has been proved by satisfied home-owners all over the country. Consult your architect or contractor.

WHEELING CORRUGATING COMPANY, Wheeling, W. Va.

BRANCHES: NEW YORK PHILADELPHIA CHICAGO MINNEAPOLIS ST LOUIS KANSAS CITY CHATTANOOGA RICHMOND



Wheeling Spanish Metal Tile

For a roof of enduring beauty at low cost, use Wheeling Spanish Metal Tile. It is proof against rust, leak and lightning. Permanent and highly practical as well as artistic and attractive. Write for full information.

Copyright 1928, Wheeling Corrugating Company

Color Enchantment in Woodwork

FOR intriguing charm and beauty in woodwork, nothing excels **Michigan-Wisconsin birch** in the wonderful new stain effects developed especially for this northern cabinet-wood.

You can now have a different color effect for each room—from light, cool green to deep, mellow brown, from delicate orchid to rich, rare ebony, in a range of shades and tones that will satisfy the most ultra-modern or conservative taste.

These new transparent stains bring out the full richness of the beautifully figured **birch** grain. And, being "in the wood" dyes (not several surface coats), they assure a finish that will not chip or "craze".

Michigan-Wisconsin birch used for **trim, floors, doors and veneer paneling** (furniture, too) is an asset to any home. Its nearly "marproof" hardness retains its fine appearance permanently.

Let us give you all the facts about this premier cabinet-wood. They are concisely stated in our new "Beautiful Birch" brochure, together with illustrations of many fine interiors by eminent architects. Sent free.

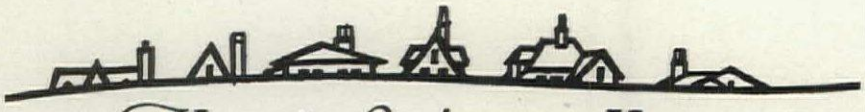
BIRCH MANUFACTURERS
227 F. R. A. Building
Oshkosh, Wisconsin

"Beautiful Birch for Beautiful Woodwork"

Wanted~a Home

Your mind has already pictured a home—a home large enough to answer comfortably your needs and at the price you can afford to pay—one that will preserve in its lines and in its fittings a hint of the personality that is yours. This mental image of the home you would like to build is waiting to be defined in terms of actual materials and known dimensions.

Assembled in the series of attractively illustrated books, listed below, are the existing counterparts of practically any style of home you may have fashioned in your mind. In one or another of the volumes you will probably find reproduced with complete floor plans just the exterior style and just the arrangement of rooms you have wanted. A study of these books will be helpful in starting you on the road to home ownership.



How to find your Home

THE HOME BUILDER'S LIBRARY—A collection of six separate style booklets—each having sixteen pages and an attractive color cover. Profusely illustrated, showing detailed floor plans—and including the most noteworthy examples of small home architecture in America today. *Complete edition—$1.25.* (Postage Prepaid) ☐

INDIVIDUAL VOLUMES of Home Builder's Library—*$0.25 each.* (Postage Prepaid)

Colonial Homes ☐ *Modern American* ☐ *Bungalows* ☐
Homes of Brick ☐ *Spanish-Italian* ☐ *English* ☐

BOOK OF 100 BUNGALOWS—Bungalows in all styles and materials—more than 100. From three to six rooms—including a number of story and a half homes. 64 pages with attractive cover in color.—*Only $0.75.* (Postage Prepaid) ☐

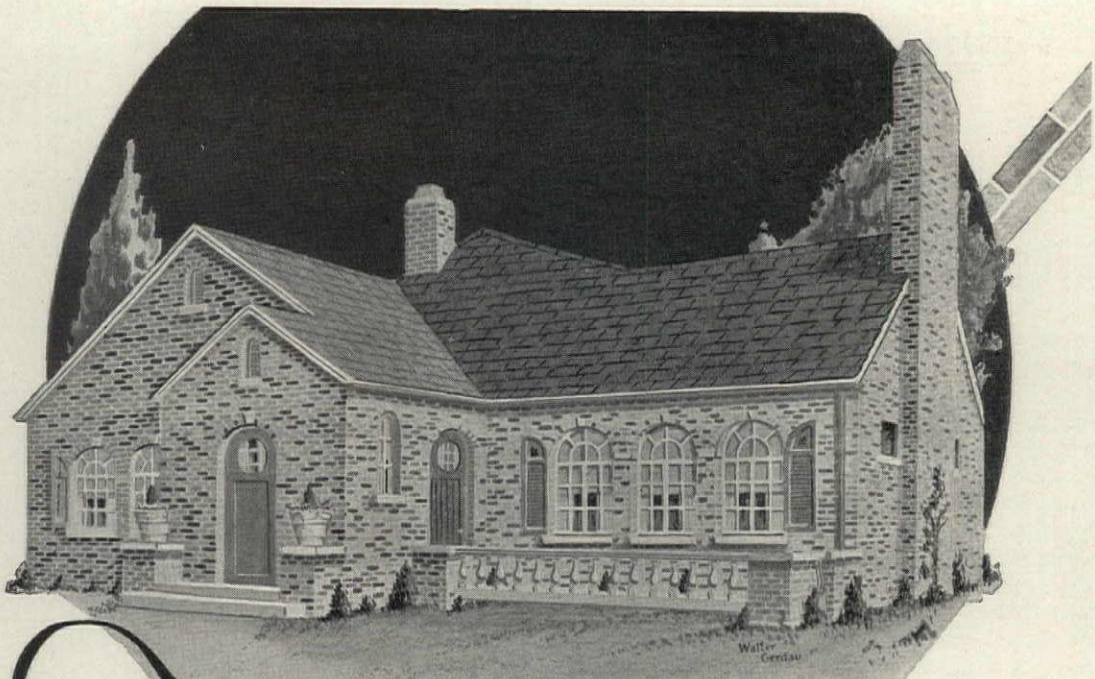
ARCHITECTS' SMALL HOUSE SERVICE BUREAU OF THE U. S. INC.
1200 Second Avenue South, Minneapolis, Minnesota.

I enclose $.....for the books checked above.

Name .....

Address .....

.....



This distinctive Brick will lift your home far above the ordinary

This photograph illustrates in some degree the distinctive Forestblend texture.

FORESTBLEND Face Brick is remarkable not only in the extraordinary wide color range it possesses but also in its distinctive texture. You must see Forestblend colors to appreciate their natural beauty. You must know the texture to realize the beautiful effects which can be secured in any house on which Forestblend Brick is used.

If you want a home distinctively your own and one which reflects your taste and good judgment, make the exterior walls of Forestblend Face Brick. By so doing you protect yourself against costly upkeep—the Forestblend home never needs painting. Its color is burned in to last for all time. Then, too, a Forestblend home always has a high resale value and depreciates in value more slowly.

The new 1928 Finzer Plan Book, "Beauty in Brick" illustrates fifty delightful homes. It contains actual photographs of the most practical and charming ones built during the past year. You will find among the homes illustrated one which you will want to build. The book tells you, too, how to secure free plans for your new home. It will be sent promptly upon receipt of 50c. Send for your copy today.

Finzer Bros. Clay Co.
Sugarcreek, Ohio

Gentlemen: I am enclosing 50c for which please send me promptly your new plan book "Beauty in Brick."

Name .....

Street .....

Town .....

The FINZER BROS. CLAY CO.
Sugarcreek, Ohio

Forestblend
CLINTON FACE BRICK

Your Home and the Part We Play

The Architects' Small House Service Bureau is a professional organization set up to protect your interests. Realizing the need of supplying the small home builder, who, for any reason, is unable to employ an individual practicing architect, with some of the professional advantages enjoyed by builders of large homes, leading architects from cities all over the United States associated to form a Bureau which would make this help generally available. The Architects' Small House Service Bureau is a public service body operating under the control of the American Institute of Architects and with the endorsement of the United States Department of Commerce.

By taking advantage of Bureau service you are benefited in at least three major ways:

1. You are assured that your home will be in good taste and of correct architectural design. Its appearance will reflect character at all times.

2. Economical planning and efficent arrangement of space are vital in the small home. A Bureau design guarantees you this. Your home will be comfortably laid out —it will be made livable, attractive, without extravagances.

3. Sound construction insures minimum depreciation and upkeep. Bureau specifications if followed by the contractor will protect your investment. Moderate cost is maintained without false economies or dangerous savings. Hold your builder to specifications and when in doubt consult a local architect.

Write the Bureau about your problems.

Architects' Small House Service Bureau of the United States, Inc.
1200 Second Avenue South
Minneapolis

Trade Mark Registered

CONTROLLED BY
THE AMERICAN INSTITUTE OF ARCHITECTS

ENDORSED BY
THE UNITED STATES DEPARTMENT OF COMMERCE

Homes Shown In This Issue

Price List and Outline of Service

YOUR purchase of Architects' Small House Service Bureau plans includes all necessary documents—three sets of blue prints covering all elevations and details, three specifications, three quantity surveys, and two forms of agreement. One complete set of reversed drawings may be obtained without extra charge if your lot demands the opposite arrangement of rooms from the original plan.

Our technical staff is at your service and will give unbiased advice on any question you may ask. Minor changes in plans to meet individual requirements will be handled by our expert draftsmen for a nominal fee based on the time involved. We will be glad to suggest also a number of local architects whom you can consult before and during the construction of your house. Remember that Bureau plans and specifications are your assurance of sound and economical construction if they are followed closely.

The fee for complete service is $6.00 a principal room, plus 50 cents for packing and postage.

PRICE OF PLANS IN THIS ISSUE

Plan No.	Order From	Price
4-A-36 (Page 16)	Northwestern Division	$24.50
4-A-37 (Page 16)	Northwestern Division	24.50
4-H- 1 (Page 17)	Potomac Division	24.50
5-B-31 (Page 8)	Mountain Division	30.50
5-C- 9 (Page 15)	North Central Division	30.50
5-D-37 (Page 20)	Lake Division	30.50
5-K-16 (Page 12)	Chicago Office	30.50
6-F-19 (Page 10)	Atlantic Division	36.50

Plans on Approval for Local Cost Estimate

To make it possible for the prospective builder to have complete costs figured under local conditions without the necessity of keeping plans which may prove more expensive to build from or less so than the builder wishes, we make the following offer:

Plans may be obtained on approval for fifteen days, by sending us your check for the full amount of the service fee. If you retain the drawings your check is accepted as payment in full.

If, for any reason, however, you decide not to build from the plans selected, return them within fifteen days (not counting time in transit) and we will deduct a charge of $5.50 from your deposit, returning the remainder to you.

If the drawings or other documents are worn, soiled, or pencil marked we shall deduct also a small charge for replacing these; as follows: blue prints, $3.00 a set; specifications, $1.00 each; quantity survey, $2.00 each; forms of agreement, 15 cents each.

Make checks payable to The Architects' Small House Service Bureau. Order plans from the Regional Service Bureau which produced the plan you like. For address see list below.

Regional Service Bureaus

NORTHWESTERN DIVISION, INC.
1200 Second Avenue South
Minneapolis, Minn.

MOUNTAIN DIVISION, INC.
1197 Stout Street
Denver, Colorado

NORTH CENTRAL DIVISION, INC.
Room 813 Goldsmith Bldg.
Milwaukee, Wisconsin

LAKE DIVISION, INC.
151 East Market Street
Indianapolis, Indiana

CHICAGO OFFICE
7 West Madison Street
Chicago, Ill.

NORTH PACIFIC DIVISION, INC.
202 Northern Life Building
Seattle, Washington

ATLANTIC DIVISION, INC.
Room 834, 250 Park Ave.
New York City

POTOMAC DIVISION, INC.
230 Fifth Avenue
Pittsburgh, Pennsylvania

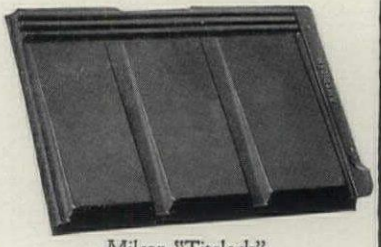
SOUTH CENTRAL DIVISION, INC.
625 Locust Street
St. Louis, Missouri

NEW ENGLAND DIVISION, INC.
194 Boylston Street
Boston, Massachusetts

The Architects' Small House Service Bureau of the United States, Inc

NATIONAL HEADQUARTERS, *1200 Second Avenue South, Minneapolis, Minn.*

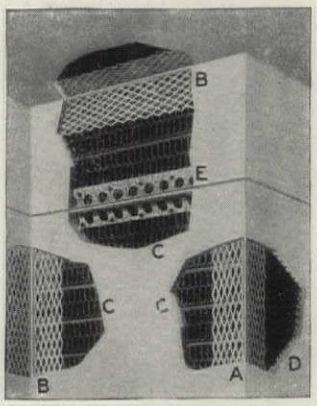
SAFE, BEAUTIFUL ROOFS



Milcor "Titelock" American Metal Tile

Milcor "Titelock" Spanish Metal Tile

SAFE, CHARMING INTERIORS, TOO!



Plastering on Milcor Metal Lath insures firesafe walls and ceilings, unblemished by cracks or dust streaks, and safe from rust.

DRIVING torrents of rain and sleet cannot penetrate a roof of Milcor Titelock Metal Tile. Even lightning is rendered powerless, as this staunch armor shunts lightning down the rain spouts harmlessly to the ground. Made of metal, Milcor Metal Tile offers no feeding place for sparks. Light in weight, it does not require heavy, expensive roof construction to support it.

The first cost of this better roofing material is reasonable. Upkeep cost is surprisingly low, because Milcor Metal Tile roofs give long, faultless service — they cannot crack, chip, break, curl, rot or burn.

For further details on Milcor Metal Tile and other firesafe metal building products, sign and mail the coupon below or drop us a line. It will not obligate you in the least.

ALL MILCOR products, including Titelock Metal Tile are now available in Steel, "Coppered Metal", Zinc, Anaconda Copper or the famous rust-resisting

ARMCO Ingot Iron

MILWAUKEE CORRUGATING COMPANY, *Milwaukee, Wis.*
Chciago, Ill. Kansas City, Mo. La Crosse, Wis.

MILCOR
METAL TILE ROOFING

Send for these Valuable Books!

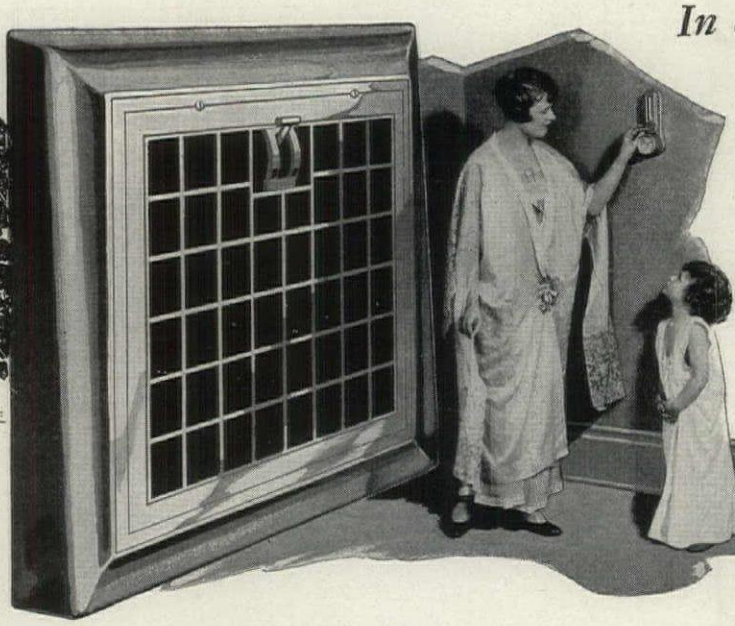
MILWAUKEE CORRUGATING CO.,
Milwaukee, Wis.

Please send, without cost or obligation, your books entitled "Modern Modes in Better Plastering" and "Safe Roofs."

Name _____

Address _____

City and State _____



In every room the triple balm of June!

June air is warm; June air is refreshingly moist; June air is stirred by gentle breezes. Happy the home whose walls enclose June comfort when biting frosts and bitter winds besiege from out of doors!

Enjoy these

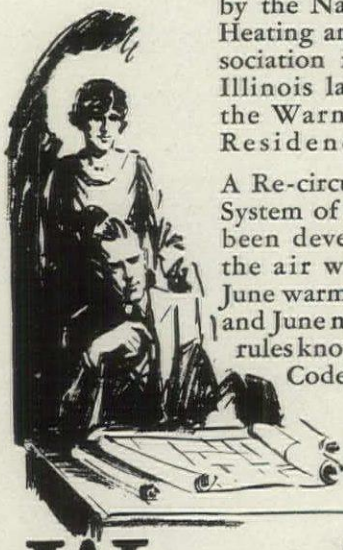
Important Improvements in Home Heating!

NEW comfort and new economy in home heating are the fruits of nine years of Scientific Research by the National Warm Air Heating and Ventilating Association in University of Illinois laboratories and in the Warm Air Research Residence at Urbana, Ill.

A Re-circulating Warm Air System of home heating has been developed that gives the air within the home June warmth, June moisture, and June movement. A set of rules known as the Standard Code has been devised to assure scientifically correct installations carrying the triple endorsement of the Dealer, the Manufacturer, and this Association.

There is only one way to be sure of enjoying the new comfort made possible by these improvements in heating practice: Insist on a Warm Air System installed according to the Standard Code.

The National Association's triangular symbol shown below is your guide in identifying dealers pledged to make Standard Code installations.



Insist on a

THE NATIONAL WARM AIR HEATING AND VENTILATING ASSOCIATION
72 East Long St., Columbus, Ohio

A book that all home owners should read

If you have not read "Health and Comfort with Warm Air" send us your name and address on the coupon below and we will mail it to you gratis. It explains the new developments in home heating science.

Warm Air System
installed according to the
Standard Code

The triangle at the right is the symbol of the National Warm Air Heating and Ventilating Association.

WARM AIR · MOIST AIR · HEAT · FRESH AIR

The Association Symbol identifies dealers pledged to make Warm Air installations according to the Standard Code.

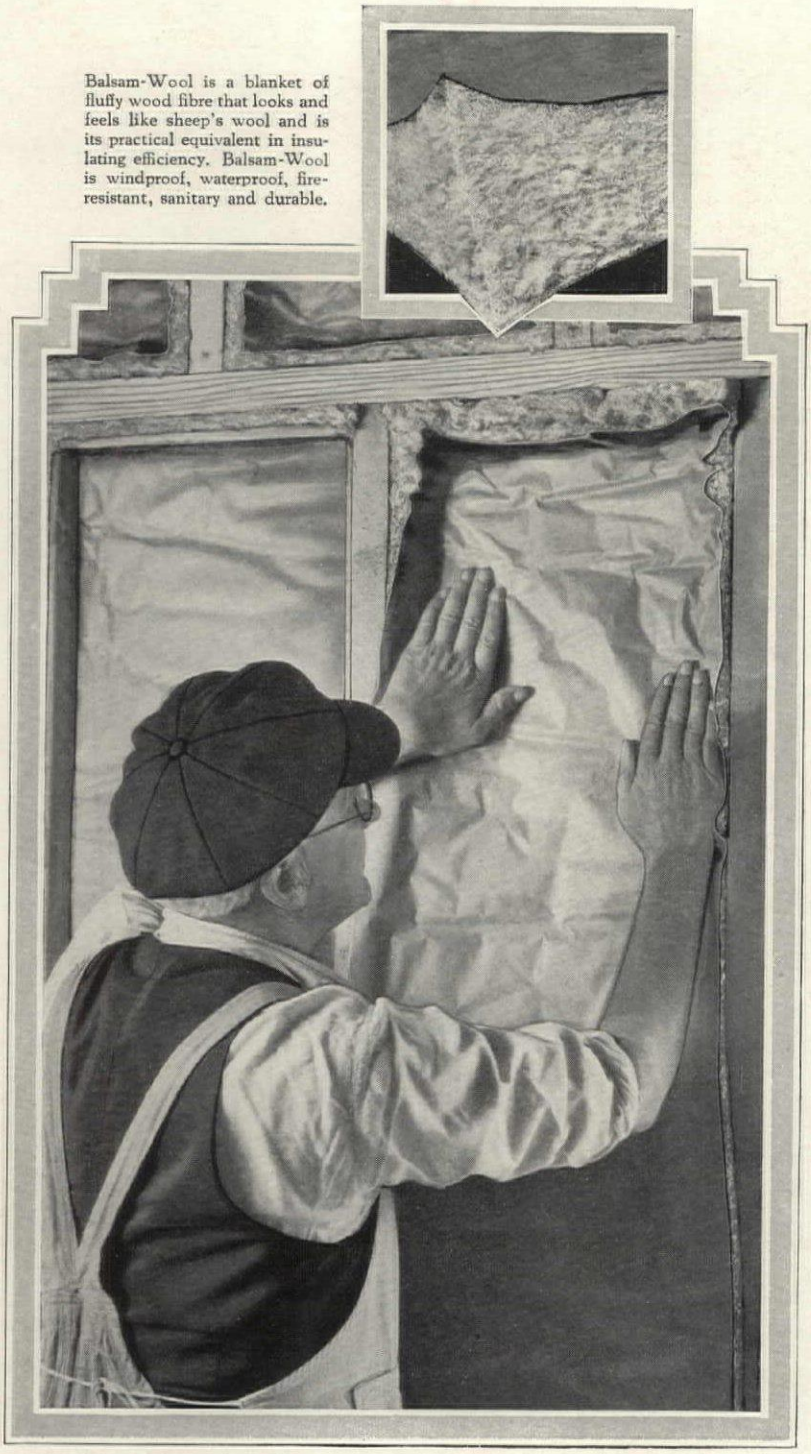
MAIL THIS COUPON

THE NATIONAL WARM AIR HEATING & VENTILATING ASSOCIATION
72 E. Long Street, Columbus, Ohio

Gentlemen:
Please send me your free book on Warm Air Health and Comfort.

Name.....
St. & No......
City.....
State.....

Balsam-Wool is a blanket of fluffy wood fibre that looks and feels like sheep's wool and is its practical equivalent in insulating efficiency. Balsam-Wool is windproof, waterproof, fire-resistant, sanitary and durable.



It tucks in

—the most important thing to remember when buying insulation

"Shall I select a rigid or a flexible material?" Keep this question in mind and it will be easy to select the right insulation for your home. Then, neither trade-names, salesmanship nor advertising will confuse you on this important subject.

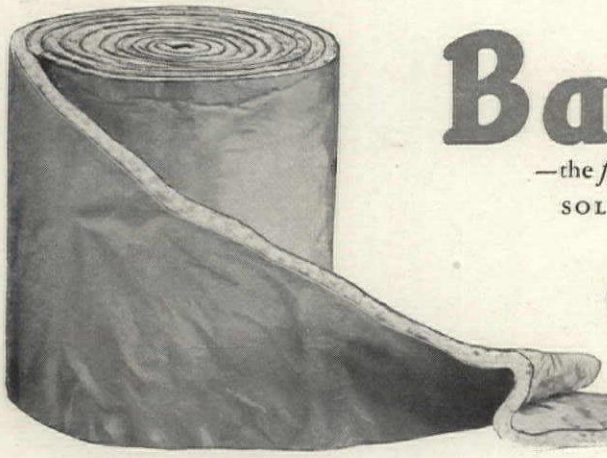
Remember this simple fact: Flexible insulation, such as Balsam-Wool, is made and used for only one purpose—*for insulation.* It is added to walls and roofs—tucked snugly between studdings and joists and into every crack and crevice to make houses heat-tight. There is no other way. Unless *it tucks in*, no material will stop the big heat loss that occurs through cracks.

The thickness of the material used is also quite as important as the type of material. Authorities recommend a *full inch* of insulation as the most profitable investment.

Balsam-Wool is the only blanket form of building insulation sold in *full inch* as well as half-inch thicknesses.

Investigate the subject thoroughly before you spend a cent for insulation. Mail the coupon now for a free sample of Balsam-Wool and a copy of our instructive booklet, "*House Comfort That Pays for Itself.*"

WOOD CONVERSION COMPANY
Makers of both flexible and rigid insulation
Mills at Cloquet, Minnesota
Sales Offices in Principal Cities



Balsam-Wool

—the *flexible* insulating and sound deadening blanket

SOLD THROUGH RETAIL LUMBER DEALERS

The Weyerhaeuser Guarantee is behind Balsam-Wool. It assures highest quality and lasting satisfaction to users.

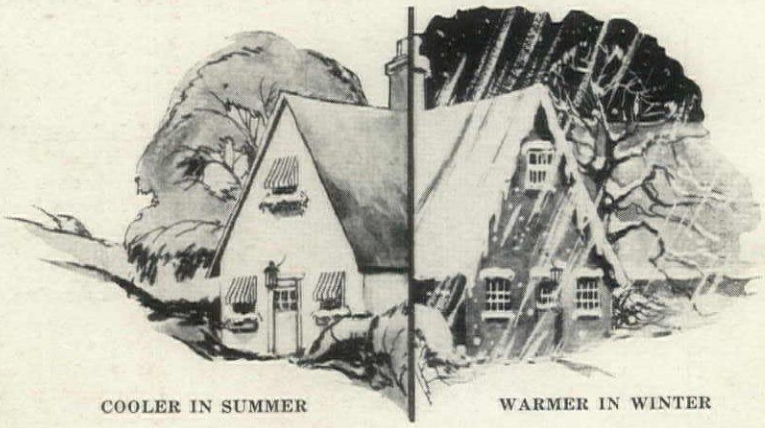
WOOD CONVERSION COMPANY
Dept. 86, Cloquet, Minn.
Gentlemen: Please send free sample of Balsam-Wool and booklet "House Comfort that Pays for Itself." I expect to build a house ☐
I own an old house - - ☐

Name_____
Address_____
City_____ State_____

BEAVER ANNOUNCES

an improved insulating board

Combining the strength, rigidity, and surface qualities essential to the perfect insulator



COOLER IN SUMMER — WARMER IN WINTER

SCIENCE discovered years ago that the thickness or hardness of a wall did not guarantee it as a barrier against heat or cold. Today a frame or stucco wall, lined or sheathed with the new, improved BEAVER INSULATING BOARD, less than one inch thick, is better assurance of winter and summer comfort than a solid wall of brick or concrete.

This because BEAVER INSULATING BOARD is a scientifically constructed insulator, made of a special FIBRE composition which contains millions of minute DEAD AIR CELLS to each square foot.

BEAVER INSULATED homes are warmer in winter, cooler in summer. This is especially noticeable when upper rooms and roofs are thoroughly insulated. Naturally, coal bills are greatly reduced.

You want these features:

1. **Improved Insulation**—Dead air is the basis of all insulation. Our laminating process retains more millions of dead air cells than any other process.
2. **Improved Rigidity — Beaver Insulating Board**, being of laminated construction, is stronger and gives greater rigidity to the structure than usual sheathing.
3. **Improved Base for Plaster—Beaver Insulating Board** bonds perfectly with plaster.
4. **Improved Nailing—Beaver Insulating Board**—because of its fibrous composition—and close texture—offers better nailing qualities.
5. **Reduced Fuel Bills**—Because this new **Beaver Insulating Board** keeps the heat **in** and the cold **out**, every ton of coal gives maximum heating service. Fewer tons are needed.

BEAVER INSULATING BOARD is the PERFECTED insulator, the product of long experience and years of laboratory research. It is made by Beaver, pioneers in the wall board business—the logical source of improved fibre insulation. In addition to its heat- and cold-resisting properties, it possesses the STRENGTH, RIGIDITY, and SURFACE QUALITIES necessary to make a wall insulator practical.

WRITE FOR FREE SAMPLES

BEAVER INSULATING BOARD comes in panels or sheets 4 feet wide and from 6 to 12 feet long. Easily and quickly applied.

We will gladly send samples, also literature, and give you specific information as to cost, construction, etc. Address Dept. 2601, The Beaver Products Co., Inc., Buffalo, N. Y.

Manufacturers also of Beaver Board, Beaver Bestwall, Beaver American Plaster, Gypsum Lath, Gypsum Block, Thermocrete (Cellular Gypsum), Varnishes and Enamels, Beaver Vulcanite Asphalt Shingles, Mineral and Smooth-Surfaced Roll Roofings, Asphalt Paints and Cements, Beaver Asbestos Shingles.

BEAVER INSULATING BOARD